

**PLANNING COMMISSION PUBLIC HEARING**

**SUBJECT:** ZMAP-2008-0017, SPEX-2008-0068, SPEX-2008-0069,  
SPEX-2008-0070, SPEX-2010-0018, SPEX- 2010-0034,  
CMPT- 2010-0014, Stonewall Secure Business Park

**ELECTION DISTRICT:** Catocin

**CRITICAL ACTION DATE:** May 22, 2011

**STAFF CONTACTS:** Judi Birkitt, Project Manager, Department of Planning  
Julie Pastor, AICP, Director, Department of Planning

**PURPOSE:** The purpose of this item is to consider rezoning 193.59 acres within the Transition Policy Area from TR-10 (Transitional Residential– 0) to PD-IP (Planned Development–Industrial Park) in order to develop a 4,927,420 square-foot secure business park. It is the Applicant's intent for the project to consist of 90 percent data centers and 10 percent other uses permitted by-right or by special exception within the PD-IP zoning district. However, the proffers would allow for 90 percent flex industrial and 10 percent commercial office. Additionally, the Planning Commission will consider six (6) Special Exception applications: (1) office, administrative, business and professional uses which do not meet the criteria contained in Section 4-503(G), (2) an increase in the allowable Floor Area Ratio (FAR) for office and data center uses from 0.40 to 0.60, (3) a private water storage tank, (4) a private water treatment plant, (5) a private utility substation, and (6) an indoor firearm range. The Commission will also consider a Commission Permit for a utility substation to determine if it is in substantial accord with the Comprehensive Plan.

**RECOMMENDATION:** Staff cannot support the applications. Staff recognizes that the development could have a positive economic impact upon the County. Staff also recognizes that non-residential uses may be reasonable for all or a portion of the site, given the proximity of Luck Stone Quarry and a future power plant and water treatment plant. However, with a proposed density of 0.6 FAR, a potential building area of 4.9 million square feet, and maximum building heights of 100 feet, the scale and intensity of the proposed development is inconsistent with the rural character, lower densities, and higher open space requirements envisioned for the Lower Sycolin subarea of the Transition Policy Area and incompatible with the residential uses to the west. Further, the application has outstanding open space, transportation, and environmental issues.

**CONTENTS OF THIS STAFF REPORT**

Section	Page	Section	Page	Section	Page
Application Information	3	Land Use	8	Utilities	18
Context	4	Compatibility	11	Public Safety	18
Proposal	5	Environmental	13	Zoning	19
Analysis	8	Transportation	15	Zoning Modifications	19
Outstanding Issues	8	Economic Development	18	Attachments	21

**SUGGESTED MOTIONS:**

1. I move that the Planning Commission forward ZMAP 2008-0017, SPEX 2008-0068, SPEX 2008-0069, SPEX 2008-0070, and SPEX 2010-0018, Stonewall Secure Business Park, to a worksession for further discussion.

**OR**

2. I move that the Planning Commission forward ZMAP 2008-0017, SPEX 2008-0068, SPEX 2008-0069, SPEX 2008-0070, and SPEX 2010-0018, Stonewall Secure Business Park, to the Board of Supervisors with a recommendation of denial.

**OR**

3. I move that the Planning Commission forward ZMAP 2008-0017, SPEX 2008-0068, SPEX 2008-0069, SPEX 2008-0070, and SPEX 2010-0018, Stonewall Secure Business Park, to the Board of Supervisors with a recommendation of approval.

**AND**

1. I move that the Planning Commission forward CMPT-2010-0014, Stonewall Secure Business Park, to a worksession for further discussion.

**OR**

2. I move that the Planning Commission deny CMPT-2010-0014.

**OR**

3. I move that the Planning Commission approve CMPT-2010-0014, Stonewall Secure Business Park, and forward it to the Board of Supervisors for ratification.

<b>I. APPLICATION INFORMATION</b>			
<b>APPLICANT</b> Stonewall Creek LLC John A. Andrews, II, Managing Member <a href="mailto:andcominv@aol.com">andcominv@aol.com</a>		<b>REPRESENTATIVE</b> Walsh Colucci Lubeley Emrich & Walsh PC Ms. Kimberlee Welsh Cummings, AICP <a href="mailto:kcummings@ldn.thelandlawyers.com">kcummings@ldn.thelandlawyers.com</a>	
<b>REQUESTS</b> An application to rezone approximately 193.59 acres from the TR-10 (Transitional Residential-10) zoning district to the PD-IP (Planned Development-Industrial Park) zoning district in order to permit the development of a secure business park consisting of up to 4,927,420 square feet of data center and office uses, a water storage tank, a water treatment plant, an indoor firearm range, and a utility substation, transmission, at a maximum Floor Area Ratio (FAR) of 0.4 (up to 0.60 by Special Exception). Applications for special exceptions to permit office, administrative, business and professional, which do not meet the criteria contained in Section 4-503(G) (data center and office uses), an increase in the maximum FAR from 0.40 to 0.60 (for data center and office uses), a water storage tank, a water treatment plant, an indoor firearm range, and a utility substation, transmission, under Sections 4-504(A), 4-506(C), 4-504(CC), 4-504(M), 4-504(DD), and 4-504(K) (pursuant to Section 5-616), respectively. Commission approval to permit a utility substation, transmission in accordance with Sections 5-616 and 6-1101. The applicant is also requesting modifications of the <u>Revised 1993 Zoning Ordinance</u> as follows:			
<b>Section</b>		<b>Proposed Modification</b>	
§4-502, Size and Location.		To permit a PD-IP district to be located in an area that is not consistent with locations identified in the Comprehensive Plan for industrial use.	
§4-506(B), Building Requirements. Building Height.		To permit a maximum building height of 100 feet without the building being set back any distance in addition to the required minimum yard dimensions along the subject property's boundary with the Dulles Greenway (Route 267), and the MR-HI, PD-GI, and other non-residential zoning districts.	
§4-507(C), Use Limitations. Screening and Buffering.		To permit a 50-foot buffer along the perimeter of the subject property to screen outdoor storage, areas for collection of refuse, loading areas, and parking from streets and agricultural and residential uses.	
<b>TAX MAP NUMBER</b>	<b>PIN</b>	<b>ACRES</b>	<b>OWNERSHIP</b>
/60/////////41/	193-27-9018	94.88 acres	Sycolin Corner LLC
/60/////////39/	194-48-6020	45.17-acre portion of a 59.94-acre parcel	LTI Limited Partnership
/61/////////13/	194-49-8227	53.54-acre parcel	LTI Limited Partnership
<b>ACCEPTANCE DATE</b> February 17, 2009		<b>LOCATION</b> East of Sycolin Rd. (Rt. 643) and south of Cochran Mill Rd. (Rt. 653)	
<b>ZONING ORDINANCE</b> Revised 1993		<b>EXISTING ZONING</b> TR-10 (Transitional Residential-10)	
<b>POLICY AREA</b> Transition Policy Area (Lower Sycolin Subarea)		<b>PLANNED LAND USE</b> Residential uses at a base density of 1 dwelling/10 acres in a clustered pattern, with the option to rezone to a density of 1 dwelling/3 acres in a Rural Village, and non-residential uses that provide a transition between the Rural and Suburban Policy Areas.	

## **II. CONTEXT**

**Location/Site Access** – The site is located a on the east side of Sycolin Road (Route 643), approximately half of a mile south of Leesburg, south of Cochran Mill Road (Route 653). The property is bounded on the north by Sycolin Creek and on the south by the Dulles Greenway, with the exception of a small portion that extends to the south side of the Dulles Greenway. The property excludes a 100-foot wide access road between Sycolin Road and the Green Energy Partners/Stonewall Hybrid Energy Park site.

The subject property is accessed from Sycolin Road (Route 643), which, along the site's frontage, is currently a two-lane paved roadway with no sidewalk or bicycle facilities. The Countywide Transportation Plan (CTP) calls for this portion of Sycolin Road to be a four-lane median divided major collector within a 90-foot right-of-way.

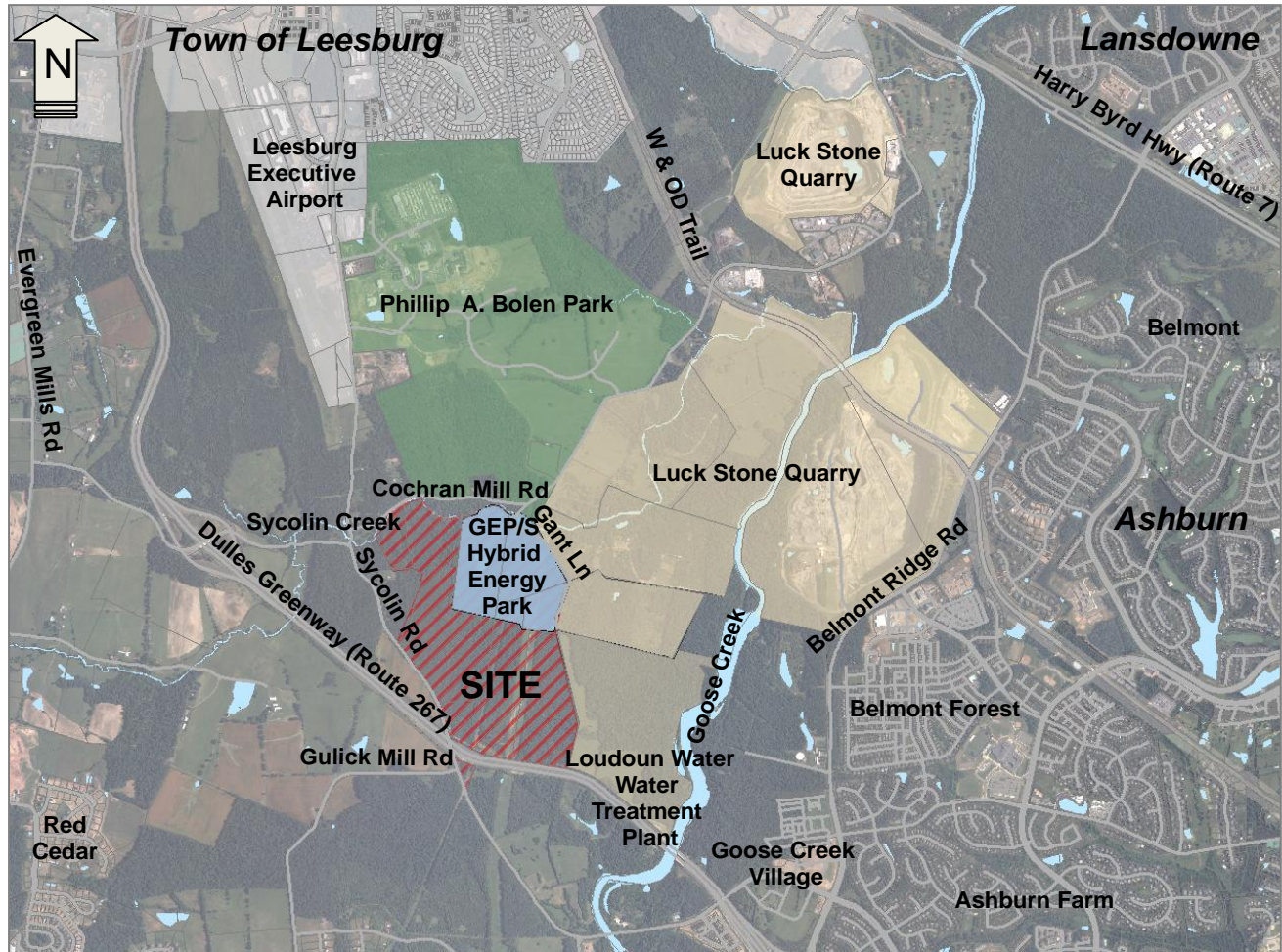
**Existing Conditions** – The site is undeveloped with no existing buildings, septic fields, or wells. Two existing 150-foot high overhead electrical power lines and towers within a 250 foot wide easement and two underground interstate gas transmission lines within a 30 foot wide easement traverse the eastern side of the subject property in a north/south direction. The property contains three archaeological sites, including a significant early 19th century pottery kiln site. The property is environmentally sensitive with wetlands, 5.44 acres of major floodplain, 4.8 acres of very steep slopes, and 13.5 acres of moderately steep slopes, diabase, and habitat. Further, the site contains forest resources including upland hardwoods on the interior of the site and a 40-inch diameter White Oak specimen tree along the Sycolin Road frontage.

The subject property is located partially within the QN (Quarry Notification) Overlay District-Luck Quarry Note Area, partially within the AI (Airport Impact) Overlay District, outside of but within one (1) mile of the Ldn 60 aircraft noise contour for the Leesburg Executive Airport, and partially within the FOD (Floodplain Overlay District). A Scenic Creek Valley Buffer extends 150 feet from the channel scar line of Sycolin Creek onto the property.

**Surrounding Properties** – Several single-family residences with frontage along Sycolin Road abut the subject property's western property line. These residential properties are zoned TR-10 (Transitional Residential-10). The property north of Sycolin Creek is zoned JLMA-20 (Joint Land Management Area-20) and consists of scattered single family residences along Cochran Mill Road. Philip A. Bolen Memorial Park is also situated north of the subject property, on the north side of Cochran Mill Road. Surrounding properties to the east are the subject of recently approved rezoning applications. To the northeast is the Green Energy Partners/Stonewall Hybrid Energy Park (ZMAP 2009-0005), which was rezoned from TR-10 and JMLA-20 to PD-GI (Planned Development-General Industry) to allow a utility generating plant and transmission facility. To the east, the Board recently approved Luck Stone's application to expand its quarrying operations (ZMAP 2009-0030, from TR-10, PD-GI, and JLMA-20 to MR-HI). To the southeast, the Board recently

approved a special exception, allowing Loudoun Water to construct a water treatment plant (SPEX 2009-0021).

**Graphic 1. Vicinity Map**



**Directions:** From Leesburg, take Sycolin Road (Route 643) south past the Leesburg Executive Airport. The site is on the left, beyond Cochran Mill Road (Route 653). Look for the pullover on the left past the large White Oak Tree.

### **III. PROPOSAL**

The Applicant seeks to rezone 193.59 acres within the Transition Policy Area from TR-10 to PD-IP in order to develop a 4.9 million square-foot secure business park that would generally consist of 90 percent data centers and 10 percent high security “office” uses, such as federal government defense contractors, government and private sector research and development facilities, secure government training and testing facilities, intelligence or information technology related analysis and implementation, or light manufacturing. As proffered, no more than 10 percent or 500,000 square feet of allowable gross floor area, whichever is greater, would be non-data center uses or other uses permitted in the PD-IP

zoning district. The business park would not be open to the general public. Internal streets would be privately owned and maintained by a Business Owner's Association. Guard houses would be situated at both the primary (Sycolin Road) and emergency (Gant Lane) site entrances.

Regarding building height, within Land Bay I, which has the greatest visibility from the Dulles Greenway, and within Land Bays B and C, which are adjacent to existing residential properties to the west, the Applicant proposes to limit building height to 45 feet. For the remaining buildings, the Applicant proposes the maximum 100-foot building height that is permitted within the PD-IP zoning district.

The Applicant's Traffic Study assumes the following three development phases:

<b>Table 1. Proposed Floor Area and Phasing</b>			
<b>Phase</b>	<b>Maximum Square Feet</b>		
	<b>Data Center</b>	<b>Office</b>	<b>Total</b>
Phase 1 (2013)	900,000 sf	100,000 sf	1,000,000
Phase 2 (2015)	1,800,000 sf	200,000 sf	2,000,000
Phase 3 (2020)	1,700,000 sf	200,000 sf	1,900,000
<b>Total</b>	<b>4,400,000 sf</b>	<b>500,000 sf</b>	<b>4,900,000 sf</b>
Source: Applicant's Traffic Study (December 2010)			

**Special Exception Requests** - The application includes the following six (6) special exception requests that, according to the Statement of Justification, are necessary to realize a high security, self-sustaining business park.

1. Floor Area Ratio (FAR) increase from 0.4 to 0.6 – For office and data center uses, the Applicant is requesting to increase the FAR from 0.4 to 0.6, which would increase the maximum allowable floor area from 3.28 million square feet to 4.9 million square feet. In the Statement of Justification, the Applicant states that the increase is needed to accommodate the large amount of floor area that data centers require for equipment and computers.

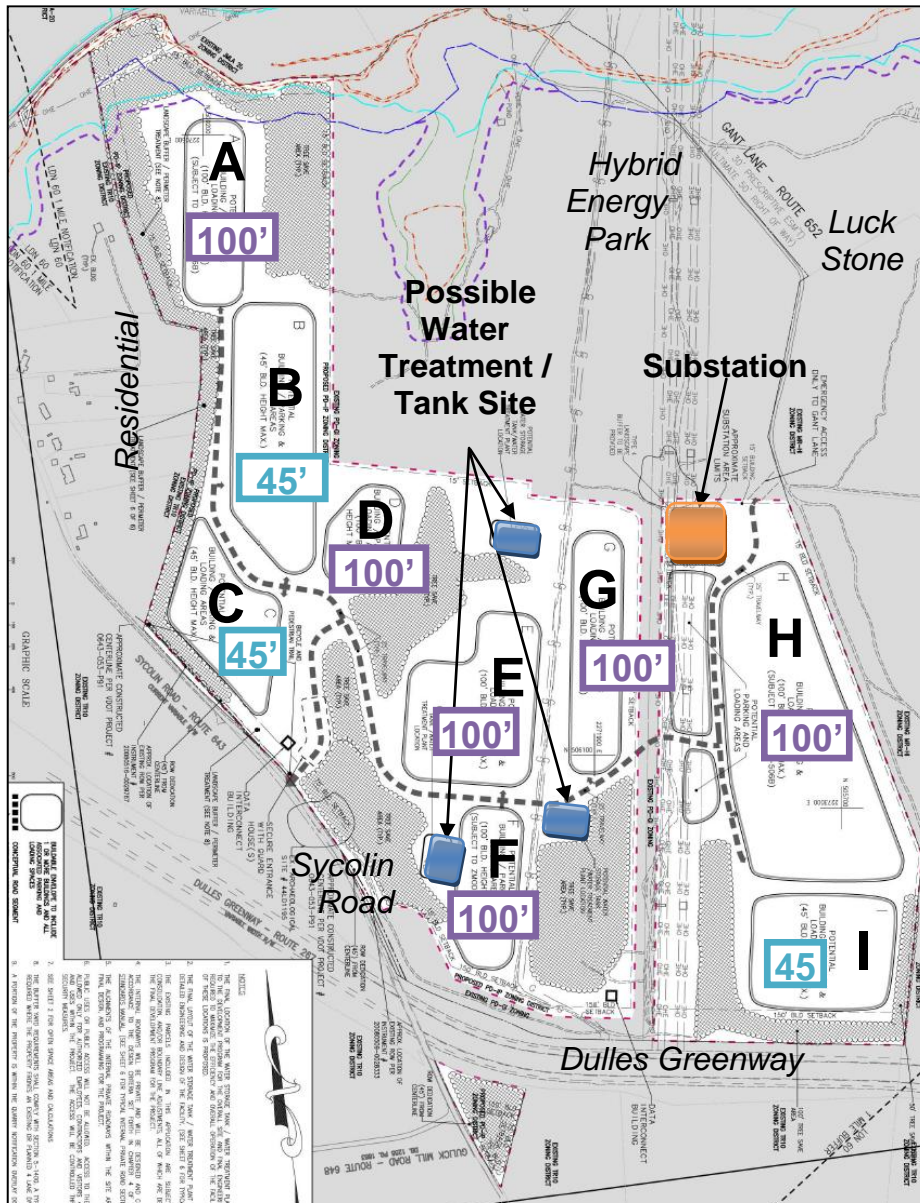
2. Office, administrative, business and professional uses that do not meet the requirements of Section 4-503(G) of the Revised 1993 Zoning Ordinance – When requesting 100 percent office/data center in the PD-IP zoning district, it is necessary for this application to request this special exception. The criteria of Section 4-503(G) apply to by-right development within the PD-IP district. As a special exception, Staff evaluates the proposal using the criteria in Section 6-1310.

3. Utility Substation, Transmission – The Applicant's Statement of Justification states that having an uninterrupted source of electrical power is crucial to the proposed secure business park. The Applicant proposes a private on-site utility transmission substation to provide a secure, redundant source of electrical power for data centers. The Statement of Justification states that the new 40 MW NOVEC substation in the Philip A. Bolen



Memorial Park will not be sufficient to meet the business park's power needs, and that local distribution lines do not carry enough power to support the proposed uses. The substation would be located under the existing overhead utility lines, north of land bays G and H, adjacent to the Hybrid Energy Park property.

**Graphic 2. Building Heights.  
 Substation and Potential Water Treatment/  
 Water Tank Locations.**



4. and 5. Water Storage Tank and Water Treatment Facility - The Applicant proposes one private water treatment facility and one water storage tank for the purpose of providing the business park a secure, redundant source of potable water. The business park would use water that is treated and stored onsite in the event that public water is unavailable or contaminated. The Concept Plan shows 3 possible locations for the tank and facility. The proposed maximum height of the water tank is 120 feet.

6. Indoor Firearm Range -The Applicant proposes an indoor firearm range for use by the business park. The firearm range would not be open to the general public and would not be located within Land Bays A, B, or C, which are the

land bays on the west side of the property, adjacent to residential uses (Sheet 4, Note 11).

## IV. ANALYSIS

**Zoning Ordinance Criteria for Approval - Section 6-1211(E)** of the Revised 1993 Zoning Ordinance states that when considering a rezoning application, the Planning Commission shall give reasonable consideration to sixteen factors or criteria for approval. **Section 6-1310** of the Revised 1993 Zoning Ordinance states that when considering a special exception application, the Planning Commission shall give reasonable consideration to twenty factors. These criteria for approval are organized below by category, followed by Staff's analysis. **Section 6-1103(A)** of the Revised 1993 Zoning Ordinance states, *"The Planning Commission shall review the application to determine if the feature for which approval is sought is substantially in accord with the adopted Comprehensive Plan."*

### Outstanding Issues Summary

1. **Land use** scale and intensity are inconsistent with the Lower Sycolin subarea of the Transition Policy Area and incompatible with nearby residential uses.
2. **Open space** is not the predominant visual element, thus the project will not blend effectively into the area.
3. **Building heights** of 100 feet are inconsistent with the 40-foot maximum planned for the Transition Policy Area.
4. **Building design** is not addressed.
5. Further measures are needed to ensure the conservation of a significant **archaeological pottery site** located adjacent to Sycolin Road.
6. Preservation of the hardwood **forest resources** is needed to block views of the special exception uses, the overhead electric lines and the cleared natural gas easement in the central portion of the site.
7. Preservation of the approximately 120-year old, 40-inch diameter **specimen White Oak tree** along the Sycolin Road frontage is recommended.
8. Phase 3 **transportation impacts** are not currently mitigated.
9. The application does not dedicate right-of-way for the CTP planned realignment of **Cochran Mill Road**.
10. **Proffered uses** need to be clarified, as they currently would allow 90 percent flex industrial and 10 percent commercial office.
11. Proposed **zoning modifications** to permit building heights of 100 feet without additional setbacks, and to allow a perimeter buffer in lieu of internal screening of loading, parking, and trash collection areas do not achieve an innovative design, improve upon the existing regulations, or otherwise exceed the public purpose of the existing regulation.

### A. LAND USE

ZO §6-1211(E)(1) *Whether the proposed zoning district classification is consistent with the Comprehensive Plan.* (2) *Whether there are any changed or changing conditions in the area affected that make the proposed rezoning appropriate.* (12) *Whether the proposed rezoning considers the current and future requirements of the community as to land for various purposes as determined by population and economic studies.* (15) *The effect of the proposed rezoning to*



*provide moderate housing by enhancing opportunities for all qualified residents of Loudoun County. ZO §6-1310 (A) Whether the proposed special exception is consistent with the Comprehensive Plan. (I) Whether the proposed special exception at the specified location will contribute to or promote the welfare or convenience of the public.*

**Analysis** – Land use intensity and open space are this application’s fundamental and interrelated outstanding issues, as discussed below.

1. **Land Use** – The proposed PD-IP zoning district classification and proposed special exception uses are not consistent with the Comprehensive Plan. The special exception uses will not promote the convenience of the public because they are proposed to serve the business park only. The County’s vision for the Transition Policy Area is for land uses that provide a visual and spatial transition between the suburban development in the east and the rural development in the west with natural open space as a predominant visual element. The Lower Sycolin subarea is anticipated to have the highest amount of open space of the six Transition Policy Area subareas. There are some changing conditions to the north and east of the property, particularly the planned quarry expansion and recently approved power plant and water treatment plant. Given the proximity to those sites, the proposed uses may be reasonable for all or a portion of the subject property. However, with a proposed density of 0.6 FAR, a potential building area of 4.9 million square feet, and maximum building heights of up to 100 feet, the scale and intensity of the proposed development is incompatible with the rural character, lower densities, and higher open space requirements envisioned for the Lower Sycolin subarea and incompatible with the residential uses to the west. **Possible solutions include density reductions, building height reductions, and/or underground construction.**
2. **Open Space** – The Lower Sycolin subarea is anticipated to have the highest amount of open space of the six Transition Policy Area subareas, ranging from 50 to 70 percent. The Concept Plan provides a minimum of 50 percent open space. Staff notes that were the project to develop with a maximum of 90 percent data centers uses, the site may have more than 50 percent open space, because the building envelopes shown on the Concept Plan include adequate space for non-data center parking, which is greater than the area required for data center parking. The Applicant has agreed to a condition that would require maintaining the areas set aside for non-data center parking as natural open space until such time that the data center buildings are converted to non-data center buildings. At that point, the extra open space beyond 50 percent would be eliminated permanently.

As open space, the Applicant proposes several Tree Save Areas. The Applicant has worked with Staff to expand the Tree Save Areas near Sycolin Creek and in very steep slopes areas. **Tree Save Areas need to be expanded further to include the high-quality hardwood trees in the central portion of the site**, most particularly

between the electric and gas easements west of the gas easement, and in the floodplain along Sycolin Creek. These mature trees would help filter views of the overhead electric lines and the cleared natural gas easement. Without protection and enhancement of these forest resources, it is unlikely that the project will be able to establish natural open spaces as predominant visual elements or that the project will blend effectively into the area, particularly when viewed from the Dulles Greenway. Additionally, much of the designated Tree Save Areas consist of lesser-quality early successional forest, which are low priorities for preservation.

The application also does not address the portion of the 50 percent open space that is not within a Tree Save Area or the perimeter buffer. The open space area would be reduced by the construction of a water storage tank, a water treatment plant, parking, two Data Interconnect Buildings, an Electrical Substation, and the planned alignment of Cochran Mill Road. With the exception of designated Tree Save Areas and identified wetlands and steep slopes, the disposition of the remaining open space is unclear. County policies state that open spaces should be left in a mostly undeveloped state and that the Green Infrastructure resources within those spaces should be protected and enhanced. The utility of the Potential Open Space as a managed natural resource area is questionable if Green Infrastructure resources are eliminated in lieu of security measures and grading changes. Overall, the amount of open space and the protection and enhancement of the Green Infrastructure resources within those spaces have not been adequately addressed.

The Applicant also proposes a 50-foot deep perimeter buffer as open space. The buffer would consist of the required Type 3 buffer with any existing trees or vegetation applying towards the buffer requirement. The application includes a request to modify the requirement for internal buffering of loading, parking, and trash collection areas. Overall, the Applicant's approach gives priority to security and line of sight rather than to the protection of environmental resources and shielding views of the business park from public rights-of-way and neighboring residential properties.

The County's priority is land use compatibility, and consistency with the planned land use must precede security design. The elimination of internal open space would diminish the ability of the proposed development to effectively blend into the landscape, which is necessary to provide a visual and spatial transition between the Rural and Suburban Policy Areas. **Solutions include withdrawing the buffer modification, extending the perimeter buffer to 100 feet wide, and proffering or agreeing to a condition requiring enhancement and long-term management of the open space that is not within a Tree Save Area or the Perimeter Buffer.** The Applicant would coordinate such a NRMP with the County Urban Forester, and it could include low growing plantings on the interior of the property to accommodate security.

Table 2. Land Use - Resolved Issues	
Commission Permit for a Utility Substation – Energy and Communication Facilities Policies of the Revised General Plan support the timely delivery of electrical service to businesses as development occurs. New Technology Companies such as data centers have a positive net fiscal impact to the County but have specialized infrastructure needs.	Dependent upon resolution of the larger land use intensity and open space issues.

## B. COMPATIBILITY

**ZO §6-1211(E)** (3) *Whether the range of uses in the proposed zoning district classification is compatible with the uses permitted on other Property in the immediate vicinity. (13) Whether the proposed rezoning encourages the conservation of properties and their values and the encouragement of the most appropriate use of land throughout the County.* **ZO §6-1310 (C)** *Whether the level and impact of any noise emanating from the site, including that generated by the proposed use, negatively impacts the uses in the immediate area. (D) Whether the glare or light that may be generated by the proposed use negatively impacts uses in the immediate area. (E) Whether the proposed use is compatible with other existing or proposed uses in the neighborhood, and adjacent parcels. (F) Whether sufficient existing or proposed landscaping, screening and buffering on the site and in the neighborhood to adequately screen surrounding uses. (S) Any anticipated odors which may be generated by the uses on site, and which may negatively impact adjacent uses.*

**Analysis** – Compatibility with adjacent residential uses to the west and views from the Dulles Greenway are key outstanding issues. The range of uses in the PD-IP zoning district may be compatible with the surrounding uses if the intensity and scale of the development were reduced and the buffers and open space were enhanced Residential property owners to the west have expressed concerns regarding a negative impact upon their property values from the development. Outstanding compatibility issues are discussed below.

1. **Building Height** – The proposed 100-foot tall building heights are a significant departure from the 40-foot maximum that the Revised General Plan envisions for the Transition Policy Area. The Policy Area's design guidelines for non-residential developments along major collector roads, such as Sycolin Road, state that non-residential uses will develop at a scale that would allow them to blend effectively into a rural landscape, that building scale should not dominate over the natural landscape, that building heights should relate to the surrounding landscape and the heights of adjacent structures.

By comparison, the adjacent residences to the west are predominantly one story and less than 15 feet tall. These houses are in the 1,000 to 2,000 square foot size range with construction dates of 1960s or earlier. The height of the existing on-site overhead power lines and lattice towers is 150 feet. The massing of these structures is less than 4.9 million square feet of up to 100-foot tall buildings. Approved heights for the Hybrid Energy Park include two 65-foot tall water tanks, a 75-foot tall cooling tower, two 70-foot

tall and two 110-foot tall combustion turbines, and four 140-foot tall exhaust stacks. Staff notes that the power plant had unique findings for approval. The maximum building height for the Loudoun Water – Water Treatment Plant is 40 feet in accordance with the MR-HI zoning district regulations.

The Applicant has agreed to limit building heights adjacent to the residential properties to the west and the Dulles Greenway to 45 feet (Land bays B, C, and I). Staff has also asked the Applicant to consider other possible **solutions, including proffering to construct some floors underground and reducing the proposed maximum building height within the remaining land bays.**

2. **Building Design** – The application does not adequately address building design, utility substation design, or screening buildings from Sycolin Road and the Dulles Greenway. The design guidelines for non-residential developments along major collector roads within the Transition Policy Area state that buildings should be shielded from the road using natural landscaping or earth berms. Staff recognizes that it is the Applicant's intent for Tree Save Areas to screen buildings from Sycolin Road and the Dulles Greenway. However, the application does not currently demonstrate this.

One solution would be proffering to high quality architectural design elements that would blend with the natural environment. This would apply to building elevations that would be visible from Sycolin Road, the Dulles Greenway, and residential uses to the west. At Staff's request, the Applicant is preparing exhibits showing how the development would look from the Dulles Greenway.

Table 3 shows how the Applicant has addressed other compatibility issues with Proffers and agreed upon Conditions.

<b>Table 3. Compatibility Resolved Issues</b>	<b>Proffer or Condition</b>
<u>Noise</u> - The Applicant proffers to attenuate generator noise with walls, baffles, and placement. Conditions require locating generators and the indoor firearm range away from residential and park uses/not in land bays A, B, or C and staggering maintenance testing of data center back-up generators so as not to coincide with peaker combustion turbine operation on the Hybrid Energy Park site.	Proffer III.13. Conditions 3-5
<u>Lighting</u> – The Applicant proffers to install lighting that is directed downward and inward, full cutoff, fully shielded, shoebox design, and mounted as low as practicable to preclude light trespass onto Land Bays A, B, and C.	Proffer III.12.
<u>Landscape Buffer</u> – The Applicant agrees to a Condition requiring enhanced landscaping adjacent to residential uses.	Condition 7
<u>Water Tank</u> – The potential locations are shielded with Tree Save Areas. A Condition of Approval limits the water tank to 120 feet tall and requires the water tank to be a neutral color or a color to match the sky.	Condition 10

## **C. ENVIRONMENTAL**

**ZO §6-1211(E)** (5) *The effect of the proposed rezoning on the County's ground water supply. (6) The effect of the uses allowed by the proposed rezoning on the structural capacity of the soils. (9) The effect of the proposed rezoning on the environment or natural features, wildlife habitat, vegetation, water quality and air quality. (16) The effect of the rezoning on natural, scenic, archaeological, or historic features of significant importance.* **ZO §6-1310 (G)** *Whether the proposed special exception will result in the preservation of any topographic or physical, natural, scenic, archaeological or historic feature of significant importance. (H) Whether the proposed special exception will damage existing animal habitat, vegetation, water quality (including groundwater) or air quality. (M) The effect of the proposed special exception on groundwater supply. (N) Whether the proposed use will affect the structural capacity of the soils.*

**Analysis** – There are three outstanding environmental and heritage resource issues, as follows.

1. **Archaeological Pottery Site** (Site 44LD1195) – The rezoning and special exception could result in impacts to a significant early 19th century pottery kiln site with tremendous future research potential is located less than 200 feet south of the proposed entrance. Given the significance of this site, every effort should be made to ensure that it is conserved in place. Any future Sycolin Road widening must occur west of the existing roadway in order to preserve this site. At Staff's request, the Applicant will not be dedicating right-of-way along the site frontage. The Applicant has worked with Staff and proffers to: (1) Coordinate with an archaeologist to delineate the pottery site boundaries. (2) Install demountable metal fencing around the delineated site boundaries. (3) Avoid the site "to the greatest extent possible" and if encroachment occurs, perform preservation techniques or a Phase 3 excavation based on a scope of work approved by the County Archaeologist. (4) Coordinate any land disturbing activity within the site with the County Urban Forester. (5) Not install signage that could bring attention to the site. To ensure that the pottery site is preserved and that the proffers are enforceable, the proffers will need to be further strengthened and revised as follows:

- a. The demountable metal fencing needs to be installed to establish a 50-foot perimeter buffer around the delineated boundaries of the pottery site, as the Applicant originally proffered.
- b. "To the greatest extent possible" is not measurable and is therefore unenforceable.
- c. As written, Proffers III. 8 and IV. 18 would allow the construction of stormwater management facilities within the boundaries of the pottery site. The proffers need to be revised to ensure that no "land disturbing activities", as defined in the Zoning Ordinance, occur within the boundaries of site #44LD1195, unless otherwise coordinated with both the County Archaeologist and the County Urban Forester.
- d. Staff suggests deleting Archaeological Sites #44LD1326 and #44LD1329 from proffers IV. 18. No special treatment or accommodation is necessary or warranted.



Additionally, Staff has included recommended conditions of approval to address tree removal within the boundaries of the archaeological site. The Applicant and Staff are continuing discussions on this issue.

2. **Forest Resources** – The application will result in the preservation of natural areas along Sycolin Creek, and some Tree Save Areas throughout the site. However, the special exception requests would result in the elimination of a significant amount of high-quality hardwood trees in the central portion of the site. In addition to providing habitat and increasing soil stability, these trees are needed to minimize the project's visual impacts and will help block views of the overhead electric lines and the cleared natural gas easement. Development of the site as proposed would result in the clearing of areas both to the east and west of the utility corridors, creating an expansive open area in the central portion of the site. **Tree Save Areas need to be expanded to include the high-quality hardwood trees in the central portion of the site**, between the gas and electric easements and west of the gas easement. Without protection and enhancement of these forest resources, it is unlikely that the project will be able to establish natural open spaces as predominant visual elements or that the project will be screened effectively within the area. The Applicant and Staff are continuing discussions on this issue.
3. **Preservation of a Specimen White Oak Tree** – To help offset the loss of the numerous hardwood trees on the site, Staff recommends preserving the approximately 120-year old, 40-inch diameter breast height (dbh) White Oak tree along the Sycolin Road frontage and using it as an entrance feature for the development. Protected, the tree could live another 100 to 300 years. By the Code of Virginia, Title 10. Conservation, Chapter 11 Forest Resources, 10.1–1127.1 (B), this particular tree could be a candidate as either a Heritage or Specimen Tree. Staff has asked the Applicant to proffer to (1) Protect the Critical Root Zone to 60 feet from the trunk, (2) Locate the site entrance and future widening of the site entrance to avoid the critical root zone to 60 feet from the trunk, (3) Coordinate a “tree invigoration program” with the County Urban Forester, (4) Label the Tree as a “Tree Save Tree” on all Site Plans and Construction Plans and Profiles. Staff is awaiting the Applicant's response on this issue.



Otherwise, the Applicant has addressed environmental impacts with proffers, agreed upon conditions, or plat notes, as detailed in Table 4. The application provides for the protection of the water quality of the Sycolin Creek, the wood turtle, and the structural capacity of the soils.

<b>Table 4. Environmental and Heritage Resources Resolved Issues</b>	<b>Proffer or Condition</b>
<u>LID &amp; BMPs</u> – The Applicant proffers to incorporate Low Impact Development Techniques and Best Management Practices.	Proffer III.6.
<u>River and Stream Corridor Resource Management Buffer</u> – The Applicant proffers to protect the buffer area with temporary chain link or super silt fencing and to limit land disturbing activity to roads, bridges, utility lines, slope stabilization, wetlands mitigation, landscaping, and forest management techniques.	Proffers III.9.
<u>Wetlands Impacts</u> – The Applicant proffers to mitigate as required by DEQ and the US Army Corps of Engineers and obtain all permits prior to land disturbing activity.	Proffer III.10.
<u>Very Steep Slopes</u> - The Applicant proffers to use temporary chain link or super silt fencing prior to and during land disturbing activity to protect very steep slopes.	Proffers III.11.
<u>Wood Turtle</u> – The Applicant proffers to search for wood turtles, provide educational materials to contractors, and use bridge spans or bottomless culverts to prevent barriers to migration.	Proffer III.15.
<u>Erosion and sediment control</u> – The Applicant proffers to heightened measures, including super silt fencing in site perimeter locations, stabilization matting, and development phasing. The Applicant also proffers to measure levels of turbidity in runoff leaving the site during construction.	Proffer III.17.
<u>Parks and Recreation</u> – In lieu of trails along Sycolin Creek, the Applicant proffers \$15,000 to the County towards trail connections within the Philip A Bolen Park to the nearby W&OD Trail at issuance of the first zoning permit.	Proffer IV.20.

#### **D. TRANSPORTATION**

**ZO §6-1211(E)** (7) *The impact that the uses permitted if the Property were rezoned will have upon the volume of vehicular and pedestrian traffic and traffic safety in the vicinity and whether the proposed rezoning uses sufficient measures to mitigate the impact of through construction traffic on existing neighborhoods and school areas.* **ZO §6-1310** (J) *Whether the traffic expected to be generated by the proposed use will be adequately and safely served by roads, pedestrian connections and other transportation services.* (O) *Whether the proposed use will negatively impact orderly and safe road development and transportation.* (T) *Whether the proposed special exception uses sufficient measure to mitigate the impact of construction traffic on existing neighborhoods and school areas.*

**Analysis** – This application has the following two outstanding transportation issues:

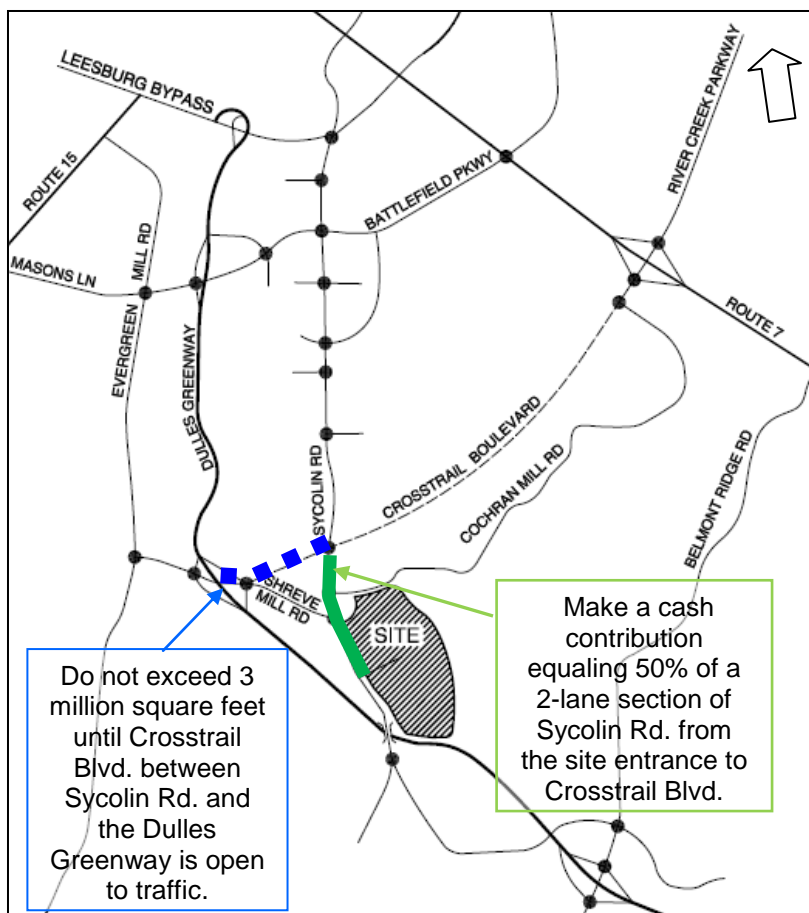
- 1. Mitigation of Phase 3 Transportation Impacts** – The application does not currently mitigate its Phase 3 transportation impacts to the north of the site. At full build-out, the project would add 10,995 average daily trips to the road network, which is currently operating at an unacceptable Level of Service. The Applicant's Traffic Study indicates that the two following improvements need to be in place in order to accommodate the background traffic and Phase 3 of the proposed development (exceeding 3 million square feet).

- Sycolin Road needs to be widened from its existing two lanes to four lanes from the site northward to Philip A. Bolen Park (\$39 million value).
- Two (2) lanes of Crosstrail Boulevard need to be constructed between Sycolin Road and the Dulles Greenway (\$15 million value).

The Applicant does not propose to construct any off-site improvements, but proffers to contribute \$0.34 per square foot of development (4.9 million square feet x \$0.34 = \$1.67 million) towards Crosstrail Boulevard and other regional road improvements that are within 2 miles of the site. Note that the Applicant proffers to begin making the cash contribution with Phase 1, although Phase 1 does not trigger off-site improvements.

The issue is that the proffered cash contribution is less than the anticipated contribution of \$0.89 per square foot of development (\$4.36 million). At full build out, 50 percent of the AM and PM peak hour traffic on Sycolin Road north of the site will be site-generated. The section of Sycolin Road that would reasonably be used to access the site from the north is between Sycolin Road and Crosstrail Boulevard. Therefore, Staff finds that the fair share contribution is 50 percent of the cost to design and construct two lanes of Sycolin Road between Crosstrail Boulevard and the site entrance (50% x \$ 8,735,400). Refer to Exhibit A for calculations prepared by the County Office of Capital Construction based on current projects and budgets.

**Graphic 3. Staff Recommended Mitigation of Phase 3 Transportation Impacts**

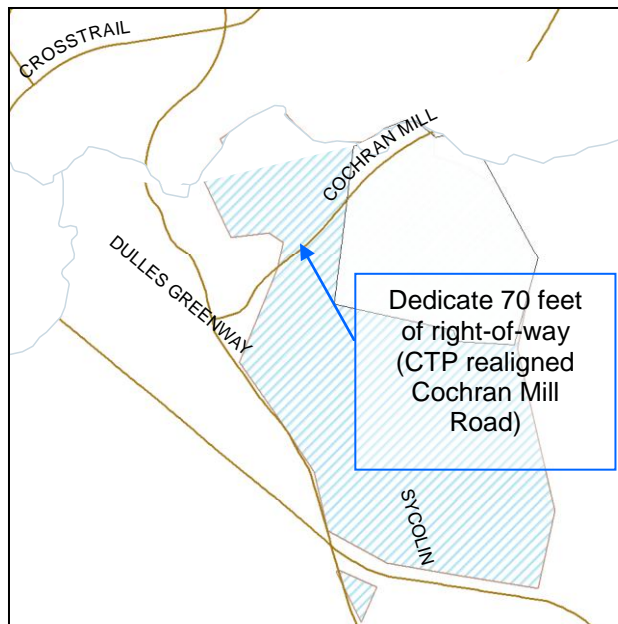


The Applicant also proffers to limit development to 3.5 million gross square feet until the segment of Crosstrail Boulevard between Sycolin Road and the Dulles Greenway is in place (by others). For consistency with the Traffic Study, Staff recommends that the proffers limit development to 3 million square feet until that section of Crosstrail Boulevard is in place.

2. **Cochran Mill Road Right-of-Way Dedication**

– The Concept Development Plan does not show a 70-foot wide right-of-way dedication for the planned realignment of Cochran Mill Road. The Applicant wishes to move forward to the Board of Supervisors without dedicating or reserving right-of-way for Cochran Mill Road, because the Applicant does not think it will be needed; the Applicant believes that Crosstrail Boulevard will serve the needs of the planned realigned Cochran Mill Road. At a minimum, Staff recommends that the Applicant proffer to reserve right-of-way to be dedicated at the request of the County or VDOT.

**Graphic 4. Cochran Mill Road Right-of-Way Dedication**



The table below describes other transportation issues that Staff examined and resolved.

<b>Table 5. Transportation - Resolved Issues</b>	<b>Trigger</b>	<b>Proffer or Condition</b>
<b><u>Construction Traffic</u></b> – The Applicant proffers to submit a delivery and construction traffic plan for review by VDOT and the County.	Prior to first site plan approval	Proffer II.3.
<b><u>Stacking</u></b> – The Applicant proffers to construct the site entrance with stacking areas to prevent back-up on Sycolin Road due to security inspections at the guard house.	Prior to first site plan approval	Proffer II.5.
<b><u>Sycolin Road</u></b> – The Applicant proffers to grant construction, grading, and utility easements for future Sycolin Road widening.	At County's request	Proffer II.4.
<b><u>Bicycle and Pedestrian Trail</u></b> – The Applicant proffers to grant and convey a 14' wide easement for a 10' wide shared bicycle / pedestrian trail along Sycolin Road, excluding the archaeological site. Staff does not recommend construction of the trail, because the alignment of the future trail and roadway is unknown. When Sycolin Road is constructed in the future, the existing roadway will need to be realigned and reconstructed.	Prior to first site plan approval	Proffer II.6.
<b><u>New Traffic Study</u></b> – The traffic study is based on 500,000 square feet of office uses and 4.5 million square feet of data center uses. Because office uses generate significantly more trips than data centers, a new traffic study would be necessary prior to exceeding 500,000 square feet of non-data center office uses.	Prior to exceeding 500,000 sf of non-data center uses	Condition 16
<b><u>Turn Lanes and Tapers</u></b> – A Condition requires the Applicant to	Phase 2	Condition

construct left and right turn lanes and transitions as recommended in the Applicant's Traffic Study.	and 3	18
Source: Applicant's Traffic Impact Analysis (December 2010) and Proffer Statement		

## **E. ECONOMIC DEVELOPMENT**

**ZO §6-1211(E)** (10) *Whether the proposed rezoning encourages economic development activities in areas designated by the Comprehensive Plan and provides desirable employment and enlarges the tax base. (11) Whether the proposed rezoning considers the needs of agriculture, industry, and businesses in future growth. (14) Whether the proposed rezoning considers trends of growth or changes, employment, and economic factors, the need for housing, probable future economic and population growth of the County and the capacity of existing and/or planned public facilities and infrastructure.* **ZO §6-1310 (P)** *Whether the proposed special exception use will provide desirable employment and enlarge the tax base by encouraging economic development activities consistent with the Comprehensive Plan. (Q) Whether the proposed special exception considers the needs of agriculture, industry, and businesses in future growth.*

**Analysis** – The application does not include a Fiscal Impact Analysis, and such a study is not required with this type of application. Data centers typically do not provide employment, but they are generally fiscally positive. The proposed special exception considers the County's needs for government contractors, data centers, and secure facilities. However, the Revised General Plan does not support a land use of the proposed scale and intensity at the subject location.

## **F. UTILITIES**

**ZO §6-1211(E)** (4) *Whether adequate utility, sewer and water, transportation, school and other facilities exist or can be provided to serve the uses that would be permitted on the Property if it were rezoned.* **ZO §6-1310 (R)** *Whether adequate on and off-site infrastructure is available.*

**Analysis** – There are no outstanding utility issues. Loudoun Water can provide central water and sanitary sewer by extension of existing facilities. The Hybrid Energy Park may provide power for the secure business park. On-site generators would be used to provide back-up power.

## **G. PUBLIC SAFETY**

**ZO §6-1310 (B)** *Whether the proposed special exception will adequately provide for safety from fire hazards and have effective measures of fire control. (K) Whether, in the case of existing structures proposed to be converted to uses requiring a special exception, the structures meet all code requirements of Loudoun County.*

**Analysis** – There are no outstanding emergency services issues. The plat provides for emergency access via Gant Lane. The Leesburg Volunteer Fire and Rescue Company will provide emergency services to the site with response times of 7 minutes, 47 seconds (fire) and 8 minutes, 45 seconds (rescue). The Applicant proffers a cash contribution of \$0.10 per square foot of development \$490,000, which is consistent with County Fire and Rescue Policy.



## V. ZONING

**Analysis** – There is one major outstanding Zoning issue. Additionally, there are few needed plat clean-up items and some suggested proffer changes.

1. **Clarification of Proffered Uses** – Staff understands that it is the Applicant's intent for the development to consist of up to 4.5 million square feet of data center uses and up to 500,000 square feet of non-data center uses, as stated in the Traffic Study and the Statement of Justification. The non-data center uses would be comprised of traditional office and other uses permitted by-right or by special exception within the PD-IP zoning district. The issue is that as currently written, the proffers would allow for 90 percent flex industrial and 10 percent commercial office. The proffer language needs to be clarified to reflect the uses presented in the Traffic Study and the Statement of Justification.

### ZONING MODIFICATIONS

**ZO §6-1504.** *No modification shall be approved unless the Board of Supervisors finds that such modification to the regulations will achieve an innovative design, improve upon the existing regulations, or otherwise exceed the public purpose of the existing regulation. No modification will be granted for the primary purpose of achieving the maximum density on a site.*

Table 6. Requested Modifications		
Zoning Ordinance Section	Requested Modification and Justification	Analysis/Recommendation
<b>ZO§4-502. Size and Location.</b> <i>PD-IP districts shall be located in areas served by one or more major arterial or collector roads, by public water and sewer, and consistent with locations identified in the Comprehensive Plan for industrial use.</i>	To permit a PD-IP district to be located in an area that is not identified in the Comprehensive Plan for industrial use. The Applicant states that the modification is justified by the surrounding quarry, water treatment plant, and hybrid energy park uses.	Staff recognizes that uses to the north and east of the subject property are utility in nature. However, <b>Staff cannot support</b> this modification, as the <u>Revised General Plan</u> does not designate the subject property for industrial uses. The Applicant does not propose an innovative design such as an extensive or enhanced open space to screen or blend the project with the Transition Policy Area.
<b>ZO§4-506 Building Requirements (B) Building Height.</b> <i>Forty-five (45) feet maximum provided that a building may be erected to a maximum height of one hundred feet if it is set back from streets or from lot lines that do not constitute boundaries of districts with lower</i>	To permit a maximum building height of 100 feet without the building being set back any distance in addition to the required minimum yard dimensions adjacent to the Dulles Greenway (Route 267), and MR-HI, PD-GI, and other non-residential zoning districts. The	<b>Staff does not support</b> building heights of 100 feet on the subject property. The <u>Revised General Plan's</u> design guidelines for non-residential developments along major collector roads within the Transition Policy Area limit building height to 40 feet. The purpose of this height restriction is to ensure that buildings blend with the natural environment and provide an

<i>maximum height restrictions, in addition to each of the required minimum yard dimensions, a distance of not less than one (1) foot for each one (1) foot of height that it exceeds the 45-foot limit</i>	Applicant states that additional setbacks are not warranted adjacent to the power plant, quarry, and water treatment plant.	effective transition between the rural area in the western part of the County and the suburban development in the east. The Applicant does not propose an innovative design such as an extensive or enhanced open space to screen or blend the project with the Transition Policy Area.
<b>4-507 Use Limitations. (C) Screening and Buffering</b> <i>Landscaping, buffering, and screening shall be used to screen outdoor storage, areas for collection of refuse, loading area, and parking from streets and agricultural and residential uses.</i>	To permit a 50' buffer around the perimeter of the subject property to meet this requirement. The Applicant states that internal buffers would block the line of sight and compromise security.	<b>Staff does not support this modification.</b> The elimination of these internal buffers would diminish the ability of the proposed development to effectively blend into the landscape, which is necessary in order to provide a visual and spatial transition between the Rural and Suburban Policy Areas. Consistency with the Comprehensive Plan land use must precede security design.
Source: Applicant's Statement of Justification (December 21, 2010)		

<b>VI. ATTACHMENTS</b>			
<b>Attachment</b>		<b>Page</b>	<b>*LMIS/LOLA File Name</b>
A	Exhibit A	A	
1	Conditions of Approval	A-1	
2	Conclusions	A-5	
3	Referral Comments		
3a	Planning, Comprehensive Planning	A-6	COMP PLAN REF3 01-28-11
3b	Historic Preservation Planner/County Archaeologist/County Urban Forester	A-14	ARCH-HIST REF3 02-17-11
3c	Building & Development, Environmental Review Team	A-17	ERT REF3 01-26-11
3d	Building and Development, Zoning Administration	A-19	ZONING REF3 02-02-11
3e	Office of Transportation Services	A-28	OTS REF3 02-27-11
3f	Parks, Recreation and Community Services	A-78	PARKS REF3 01-10-11
3g	Health Department - Environmental	A-85	HEALTH REF3 01-04-11
3h	Loudoun Water	A-86	LCSA REF2 09-28-10
3i	Economic Development	A-87	ECON DEV REF1 04-24-09
3j	Town of Leesburg	A-89	TOL REF3 02-24-11
3k	Virginia Department of Conservation and Recreation	A-92	VDCR REF1 04-15-09
3l	Virginia Department of Transportation	A-94	VDOT REF3 02-17-11
3m	Disclosure of Real Parties in Interest	A-97	DISCLOSURE 03-01-11
4	Applicant's Statement of Justification	A-114	SOJ2 12-22-10
5	Applicant's Response to Referral Comments		RESPONSE3 02-18-11
6	Applicant's Proffer Statement		PROFFERS 02-18-11
7	Plat		CDP 02-18-11
*These documents can be viewed online on the Loudoun Online Land Applications System (LOLA) at <a href="http://www.loudoun.gov">www.loudoun.gov</a> . Paper copies are also available in the Department of Planning.			

**DRAFT DOCUMENT OF WORKING ISSUES  
TO ADDRESS  
WITH CONDITIONS OR PROFFERS**

(March 2, 2011)

**Stonewall Secure Business Park, SPEX-2008-0068 (Office, administrative, business and professional, which do not meet the criteria contained in Section 4-503(G) and Floor area ratio up to 0.60 for office and data center uses), SPEX-2008-0069 (Water storage tank), SPEX-2008-0070 (Water treatment plant), SPEX-2010-0018 (Firearm range, archery range, indoor), and SPEX- 2010-0034 (Utility Substation, Transmission)**

1. Substantial Conformance. The development of the Special Exception Uses, "Office, administrative, business and professional, which do not meet the criteria contained in Section 4-503(G)", a Floor Area Ratio up to 0.60 for office and data centers, a Water Storage Tank, a Water Treatment Plant, and Firearm Range, Archery Range, Indoor, and a Utility Substation, Transmission, in the PD-IP (Planned Development – Industrial Park) zoning district, shall be in substantial conformance with these conditions and with the plan set entitled "Stonewall Secure Business Park Zoning Map Amendment Application 2008-0017 Special Exception Applications: 2010-0018 / 2008-0068 / 2008-0069 / 2008-0070 / 2010-0034 Commission Permit Plat 2010-0014" consisting of six (6) sheets numbered as 1 through 6, dated July, 2009, as revised through 2-18-11, and prepared by William H. Gordon Associates, Inc. (the "SPEX Plat"). Approval of this application for Tax Map # /60////////41/ (193-27-9018), Tax Map /61////////13/ (194-49-8227), and the portion of Tax Map # /60////////39/ (194-48-6020), and lying within the "PROPOSED ZONING LINE (PD-IP)" as delineated and labeled on Sheet 5 of the SPEX Plat (the "Property") shall not relieve the Applicant or the owners of the Property from the obligation to comply with and conform to any other Zoning Ordinance, Codified Ordinance, or applicable regulatory requirement. As used in these conditions, the term "Applicant" includes the owner of the Property subject to this Special Exception approval, its successors, and parties developing, establishing or operating the approved Special Exception Uses.
2. Lot Consolidation. Prior to first site plan approval, the Property shall be consolidated into one (1) parcel.
3. Back-Up Generators. Emergency back-up generators or equipment shall not be located within Land Bays A, B, and C. The Applicant shall install baffling walls or other noise attenuation measures to ensure that noise generated by emergency back-up generators complies with Section 5-1507 of the Revised 1993 Zoning Ordinance.
4. Indoor Firearm Range. The indoor firearm range shall not be located within Land Bays A, B, and C. The Applicant shall use noise attenuation measures as

necessary to ensure that noise generated by the indoor firearm range complies with Section 5-1507 of the Revised 1993 Zoning Ordinance.

5. Noise. The Applicant shall coordinate with the Green Energy Partners/Stonewall Property Owners to stagger maintenance testing of data center back-up generators so as not to coincide with peaker combustion turbine operation for the purpose of minimizing noise impacts.
6. Open Space. The Property shall consist of a minimum of fifty percent (50%) open space, as defined in the Revised General Plan.
7. Buffer Adjacent to Residential. The Applicant shall plant and maintain a Type IV Buffer along the Property boundary adjacent to Land Bays B and C for as long as the abutting properties are a residential zoning district.
8. Areas Reserved for Non-Data Center Parking. Until such time that data center uses are converted to non-data center office uses, the Applicant shall maintain as natural open space the land area within the areas labeled on the SPEX Plat as "POTENTIAL BUILDING / PARKING & LOADING AREAS" that would accommodate the parking areas for such non-data center office parking.
9. Screening Mechanical Equipment and Data Interconnect Buildings – Mechanical equipment (i.e. generators, chilling plants, etc.) and data interconnect buildings shall be screened from adjacent residential properties, Sycolin Road, and the Dulles Greenway. Screening methods shall include, but not be limited to, fencing, walls of similar construction to the buildings on site, or landscaping.
10. Water Tank. The water tank shall not exceed a height of one-hundred and twenty feet (120') and shall be a light, neutral color or a color to match the sky.
11. Land Disturbing Activity. Land disturbing activity, including but not limited to that associated with perimeter security treatments, supplemental plantings, fencing, berm, roadside swales, impenetrable or trespass deterrent plantings, and the construction or widening of the Sycolin Road entrance to the Property, shall not encroach into the boundaries of the Sycolin Road Pottery Site, "EX. ARCHAEOLOGICAL SITE # 44LD1195" ("Site 44LD1195"), as labeled on the "SPEX Plat", unless otherwise coordinated with the County Archaeologist in accordance with these Conditions.
12. Tree Removal. Any tree removal within the boundaries of Site 44LD1195 shall adhere to the following Conditions with the express intent of avoiding disturbance of or impact to Site 44LD1195:
  - a) Tree removal shall only occur in coordination with the County Archaeologist and County Urban Forester.
  - b) Heavy machinery shall not be located within the boundaries of Site 44LD1195.



- c) Tree removal shall only occur when soils are dry and hard.
  - d) Notwithstanding the existing fallen trees with exposed root balls, any trees cut shall be cut leaving the root and duff in place.
13. Replanting. Any buffers and plantings associated with the "LANDSCAPE BUFFER / PERIMETER TREATMENT", as labeled on the SPEX Plat, shall not apply to the delineated boundaries of Site 44LD1195. Any planting, re-planting, seeding, or any other treatment within the delineated boundaries of Site 44LD1195 shall take place in coordination with the County Archaeologist and Urban Forester and with the express intent of avoiding disturbance of or impact to Site 44LD1195.
14. Tree Save Areas. Exclusive of Site 44LD1195, the Applicant shall reforest areas labeled on the SPEX Plat as "TREE SAVE AREA (TYP)" ("TSAs"), in accordance with a Reforestation Plan developed in coordination with the County Urban Forester and in accordance with the following Conditions:
- a) In conjunction with the first site plan or construction plans and profiles application, the Applicant shall post a bond with the County in an amount sufficient to cover the cost of implementing the Reforestation Plan.
  - b) Reforestation plant material within TSAs shall consist of one-inch (1") caliper native trees at a minimum density of one hundred (100) trees per acre or smaller plant material (3-gallon containerized, bare root seedlings, etc.), as coordinated with the County Urban Forester.
  - c) The Applicant shall implement such Reforestation Plan no later than one (1) growing season after the beginning of construction.
  - d) The Applicant shall ensure a minimum of eighty percent (80%) of the initial planting is determined to be established after two growing seasons. The Applicant shall conduct an annual inspection, in coordination with the County Urban Forester, to verify such establishment. If the eighty percent (80%) establishment is not achieved after the second growing season, the Applicant shall conduct a one (1) time planting to bring the TSAs to full stocking.
15. White Oak Tree. The Applicant shall preserve the approximately forty-inch (40") diameter breast height (dbh) White Oak located along the Sycolin Road frontage of the Property. The Sycolin Road entrance to the Property and widening of such entrance shall be located to accommodate the preservation of such White Oak. The Applicant shall protect the Critical Root Zone of such White Oak, measuring sixty feet (60') from the trunk in all directions, and shall implement a Tree Invigoration Program, as coordinated with the County Urban Forester, for such White Oak. All site plans for the Property shall depict such White Oak Tree and shall label such White Oak Tree as a Tree Save Tree.

16. Traffic Study. Prior to exceeding 500,000 square feet of office uses, exclusive of data centers, and in conjunction with the submission of the first site plan application for development of such uses, the Applicant shall submit a new traffic study for such uses to the County for review and approval, and the Applicant shall install the improvements recommended in the traffic study in the timeframe recommended in the traffic study.
17. Signal Warrant Study. No earlier than one (1) year prior to build out of the project, the Applicant shall submit to VDOT a signal warrant study. Such signal warrant study shall be provided in a separate booklet and shall provide alternatives other than a traffic signal.
18. Turn Lanes and Tapers. Prior to exceeding 3 million square feet of development, the Applicant shall construct dual westbound left-turn lanes out of the site at the site-access driveway.
19. Floor Area Ratio - The 0.6 FAR applies only to data center and office uses.

## CONCLUSIONS

1. The proposed building height, scale, and intensity are inconsistent with the land use policies for the Lower Sycolin subarea of the Transition Policy Area and incompatible with the residential uses to the west.
2. The application can not screen views of 100-foot tall buildings from Sycolin Road and the Dulles Greenway or from adjacent residential uses and does not address building design.
3. The Applicant does not propose an innovative design such as extensive or enhanced open space to screen or blend the project within the Transition Policy Area.
4. The application does not adequately address the preservation of archaeological site #44LD1195.
5. The application does not adequately mitigate its Phase 3 transportation impacts.
6. The application does not provide the 70-foot dedication of right-of-way for Cochran Mill Road, as called for in the Countywide Transportation Plan.
7. The application adequately mitigates its lighting and noise impacts.
8. The application provides for the protection of the wood turtle.
9. The application provides for water quality protection and erosion and sediment control measures.
10. The Energy and Communication Facilities Policies of the Revised General Plan support the timely delivery of electrical service to businesses as development occurs. New Technology Companies such as data centers have a positive net fiscal impact to the County, but have specialized infrastructure needs, such as the proposed utility transmission substation.
11. The application provides for public trails within the Philip A Bolen Park and the W&OD Trail (\$15,000).
12. The application provides a Fire and Rescue contribution (\$490,000) that is consistent with County policy.



REVISIONS	
	REVISED PER CLIENT AND COUNTY COMMENTS 8-11-10
	REVISED PER COUNTY COMMENTS 12-15-10
	REVISED PER COUNTY COMMENTS 2-18-11
SURVEY	
DESIGN	
C.STEPHENSON	
DRAWN	
C. STEPHENSON	
CHECKED	
DATE	
July, 2009	
SCALE	
HORIZ:	AS SHOWN
VERT:	N/A
COVER SHEET	
STONEWALL SECURE BUSINESS PARK ZMAP 2008-0017 & SPEX 2008-0068, 2008-0069, 2008-0070, 2010-0018, 2010-0034 & CMPT 2010-0014 CATOCTIN ELECTION DISTRICT LOUDOUN COUNTY, VIRGINIA	
JOB	2720-0102
DRAWN	
CHECKED	
1 OF 7	



NOTES:  
EXISTING CONDITIONS MAP

- THE OVERALL BOUNDARY INFORMATION SHOWN WAS OBTAINED FROM A BOUNDARY SURVEY PERFORMED BY URBAN ENGINEERING CONDUCTED JANUARY 2005.
  - SITE AREA FOR ZMAP/SPEX/CMPT = +/- 193.59 AC
  - UTILITY TRANSMISSION LINES ARE SHOWN AND NOTED HEREON PURSUANT TO THE INFORMATION AVAILABLE FROM THE LOUDOUN COUNTY OFFICE OF MAPPING AND GEOGRAPHIC INFORMATION.
- ONSITE TOPOGRAPHY IS SHOWN WITH TWO (2') FOOT CONTOURS OBTAINED FROM TOPOGRAPHIC SURVEY PERFORMED BY URBAN ENGINEERING. ADJACENT TOPOGRAPHY WHERE SHOWN IS FIVE (5') FOOT CONTOURS OBTAINED FROM THE LOUDOUN COUNTY OFFICE OF MAPPING & GEOGRAPHIC INFORMATION.
- AN APPROXIMATE AREA OF ±13.5 ACRES OF MODERATELY STEEP SLOPES AND ±4.8 ACRES OF VERY STEEP SLOPES WERE IDENTIFIED FROM A STEEP SLOPES ANALYSIS AND ARE DEPICTED ON THE EXISTING CONDITIONS MAP AND SITE DEVELOPMENT WILL COMPLY WITH SECTION 5-1508 STEEP SLOPE STANDARDS.
- WATER COURSES, DRAINAGE WAYS AND OTHER BODIES OF WATERS ARE DEFINED ON THIS EXISTING CONDITIONS MAP AND WERE ACQUIRED FROM LO. CO. OFFICE OF MAPPING & GEOGRAPHIC INFORMATION.
  - WATERS OF THE U.S. (INCLUDING WETLANDS) DELINEATION BOUNDARIES SHOWN HEREON PROVIDED BY WETLAND STUDIES AND SOLUTIONS, INC., AND CONFIRMED BY THE U.S ARMY CORPS OF ENGINEERS JURISDICTIONAL DETERMINATION #05-R2064, DATED NOV. 18, 2005, ARE FOR INFORMATIONAL PURPOSES ONLY. THESE AREAS ARE SUBJECT TO MODIFICATION AND MAY BE IMPACTED UNDER PERMITS ISSUED BY THE UNITED STATES ARMY CORPS OF ENGINEERS UNDER SECTION 404 OF THE CLEAN WATER ACT AND/OR THE VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY UNDER SECTION 401 OF THE CLEAN WATER ACT AND THE VIRGINIA WATER PROTECTION PROGRAM.
- THE GENERAL LOCATION OF TREE COVER SHOWN HEREON WAS OBTAINED FROM LOUDOUN COUNTY G.I.S. DATA. REFER TO "FOREST MANAGEMENT PLAN & COVER TYPE" STUDY PROVIDED BY ZIMAR & ASSOCIATES, INC., DATED JULY 31, 2008, WHICH HAS BEEN PREPARED BASED UPON CRITERIA PROVIDED BY THE COUNTY FORESTER. THIS STUDY WILL PROVIDE SITE SPECIFIC EXAMINATION OF THE LOCATION AND DESCRIPTION OF VEGETATION AND EXISTING TREE COVER WHICH INCLUDES THE FOLLOWING:
  - A. A DESCRIPTION OF THE TYPE AND EXTENT OF TREE COVER.
  - B. AN INVENTORY OF EVERGREEN TREES WITH CALIPERS OF 14 INCHES OR LARGER & DECIDUOUS TREES WITH CALIPERS OF 22 INCHES OR LARGER ARE SHOWN IN ATTACHMENT X OF REFERENCED STUDY.
  - C. FOR POTENTIAL ENDANGERED SPECIES HABITAT SEE STUDY TITLED "ENDANGERED AND THREATENED SPECIES HABITAT EVALUATION AND RARE PLANT SPECIES/COMMUNITY ASSESSMENT", DEVELOPED BY WETLAND STUDIES AND SOLUTIONS, DATED NOV. 8, 2004.
- EXISTING MAJOR & MINOR FLOODPLAIN ILLUSTRATED ON THIS MAP WERE OBTAINED FROM LOUDOUN COUNTY GIS INFORMATION AND ARE SUBJECT TO SECTION 4-1500 (FOD OVERLAY DISTRICT) OF THE REVISED 1993 ZONING ORDINANCE.
- SOILS AND CORRESPONDING HYDRIC SOILS GROUPS SHOWN HEREON WERE OBTAINED FROM THE LOUDOUN COUNTY SOILS SURVEY.
- THE LOCATION, NAMES AND/OR NUMBERS OF ALL ARTERIAL, COLLECTOR AND LOCAL STREETS THAT CONNECT OR ARE ADJACENT TO THE PROPOSED PROJECT WERE OBTAINED FROM THE LOUDOUN COUNTY OFFICE OF MAPPING & GEOGRAPHIC INFORMATION.
- ALL EXISTING STRUCTURES AND BUILDINGS FOUND ON THE SUBJECT PROPERTY WILL BE REMOVED.
  - DELINEATION OF EXISTING STRUCTURES CAN BE FOUND IN THE STUDY TITLED "PHASE I ARCHAEOLOGICAL INVESTIGATIONS OF THE CIRCA 652 ACREE CREEKSIDE AREAS 4 AND 5 PROPERTY", DEVELOPED BY THUNDERBIRD ARCHEOLOGY IN OCTOBER 2005.
- THERE ARE NO KNOWN GRAVE, OBJECT OR STRUCTURES MARKING A PLACE OF BURIAL.
- EXISTING ROADS, STRUCTURES, STONE WALLS, FENCES AND OTHER PROMINENT FEATURES WERE OBTAINED FROM THE COUNTY PCT MAPS.
- THE SITE FALLS WITHIN LDN-60 1 MILE BUFFER OVERLAY DISTRICT (LEESBURG AIRPORT). A SMALL PORTION OF PIN# 193-27-9018 IS WITHIN THE LDN 60 NOISE CONTOUR. THE SITE IS PARTIALLY WITHIN THE QUARRY NOTIFICATION OVERLAY DISTRICT. REQUIREMENTS SET FORTH IN SECTION 4-1400 AND SECTION 4-1800 OF THE LOUDOUN COUNTY ZONING ORDINANCE WILL BE OBSERVED.
- FEDERAL AND STATE PERMITS MAY BE REQUIRED UNDER SECTION 404 OF THE CLEAN WATER ACT BY THE UNITED STATE ARMY CORPS OF ENGINEERS AND/OR THE VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY UNDER SECTION 401 OF THE CLEAN WATER ACT AND THE VIRGINIA WATER PROTECTION PROGRAM.
- REFER TO PHASE I ENVIRONMENTAL SITE ASSESSMENT - CREEKSIDE PHASE I, LEESBURG, VA, DATED OCTOBER 6, 2004 FOR A LISTING OF ANY KNOWN HAZARDOUS OR TOXIC SUBSTANCES AS SET FORTH IN TITLE 40, CODE OF FEDERAL REGULATIONS PARTS 116.4, 302.4 AND 355; ALL HAZARDOUS WASTE AS SET FORTH IN COMMONWEALTH OF VIRGINIA DEPARTMENT OF WASTE MANAGEMENT.

PARKING AND LOADING SPACES PER SECTION 5-1100

DATA CENTER

(REQUIRED)

PARKING: 1 PER EMPLOYEE ON THE MAJOR SHIFT.

LOADING: 1/25,000 SQ. FT. GFA UP TO 500,000 SQ. FT. PLUS ONE FOR THE NEXT 50,000 SQ.FT. PLUS ONE/100,000 SQ. FT. THEREAFTER.

OFFICE AND BUSINESS SERVICES

REQUIRED PARKING: 4/1,000 SQ. FT. OF GFA FOR UP TO 30,000 SQ. FT.; 3.3/1,000 SQ. FT. OF GFA THEREAFTER

LOADING: NONE FOR THE FIRST 30,000 SQ FT THEN ONE/100,000 SQ FT THEREAFTER

(PROVIDED)

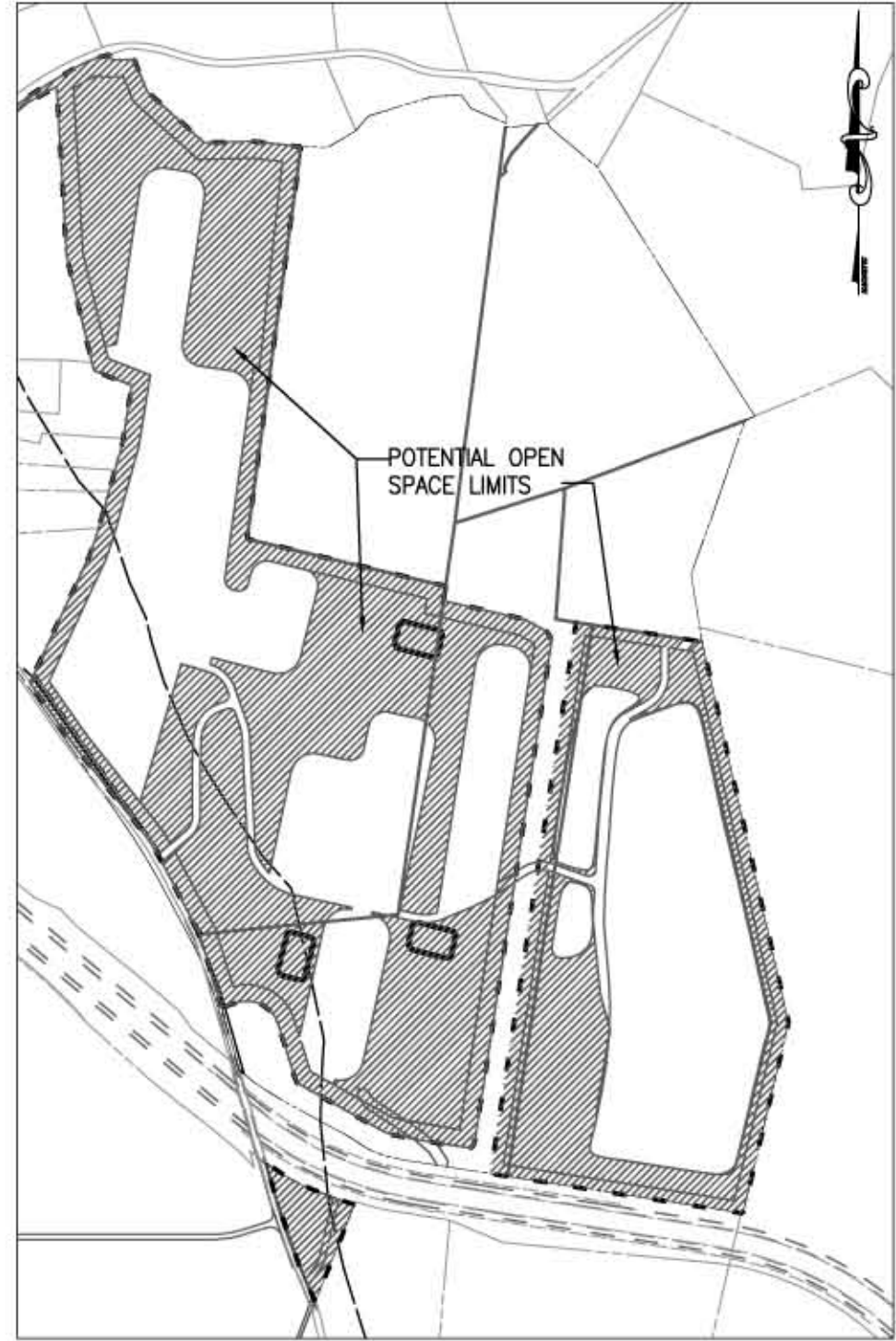
PARKING AND LOADING SPACE COUNTS WILL BE DETERMINED AT SITE PLAN STAGE BASED ON FINAL DEVELOPMENT AREAS, USES AND ANTICIPATED EMPLOYEES.

NOTES:  
CONCEPT PLAN

- THE PROPERTY IS GOVERNED UNDER THE REVISED 1993 ZONING ORDINANCE. EXISTING ZONING: TR-10
- PROPOSED ZONING: PD-IP
- THERE ARE NO PROPOSED RESIDENTIAL DISTRICTS WITH THIS APPLICATION.
  - SEE THIS SHEET FOR PROPOSED FAR CALCULATIONS. SEE **CONCEPT PLAN** SHEET FOR THE DELINEATION OF SETBACK LINES AND ENTRANCES TO THE SITE.
  - ACCESS IS SHOWN ON THE CONCEPT PLAN. ALL ACCESS INCLUDING VEHICULAR, PEDESTRIAN AND BICYCLES ARE CONTROLLED OR PROHIBITED FOR SECURITY PURPOSES.
  - ALL EXISTING AND PROPOSED ABUTTING ROADS AND THEIR RIGHT-OF-WAY WIDTHS ARE LOCATED ON THE **CONCEPT PLAN**.
  - ALL EXISTING NON-RESIDENTIAL ACCESS POINTS, EXISTING AND PROPOSED ROADWAY INTERSECTIONS AND MEDIAN BREAKS ARE LOCATED ON THE **CONCEPT PLAN**.
  - ALL MAJOR ROADS ADJACENT TO THE SUBJECT PROPERTY IDENTIFIED IN THE COUNTY TRANSPORTATION AND/OR THE CURRENT LOUDOUN COUNTY / VDOT 6-YEAR PLAN ARE SHOWN.
  - THE TRAFFIC CIRCULATION IS SHOWN ON SHEET 4 OF 7.
  - SEE SHEET 5 **CONCEPT / SPEX PLAN OVER EXISTING CONDITIONS** SHEET FOR THE PROPOSED LAND USE OVER THE EXISTING CONDITIONS.
  - UTILITIES:
    - SANITARY SEWER TO BE CONNECTED TO EXISTING FACILITIES AND IS INCLUDED IN THE LOUDOUN WATER SERVICE AREA.
    - MUNICIPAL WATER TO BE CONNECTED TO EXISTING FACILITIES AND IS INCLUDED IN THE LOUDOUN WATER SERVICE AREA.
    - STORMWATER MANAGEMENT (SWM) AND BEST MANAGEMENT PRACTICES (BMP) ARE TO BE PROVIDED BY ADEQUATE OUTFALL TO THE MAJOR FLOOD PLAIN AND BY ON-SITE TREATMENT VIA A COMBINATION OF EXTENDED AND CONVENTIONAL FACILITIES WITH LOW IMPACT DESIGN METHODOLOGIES IN ACCORDANCE WITH FACILITIES STANDARDS MANUAL CRITERIA. LOW IMPACT METHODOLOGIES TO SATISFY BOTH SWM AND BMP REQUIREMENTS WILL BE THE PREFERRED APPROACH WHERE PRACTICAL.
  - THE DEVELOPMENT PROGRAM PROPOSES A SECURE BUSINESS PARK. THERE SHALL BE NO FACILITIES OPEN TO THE GENERAL PUBLIC.
  - ADJACENT PROPERTY:
    - FOR APPROVED AND EXISTING PROJECTS OR SUBDIVISION NAMES, LOT LINES, LOT NUMBERS AND ZONING SEE **VICINITY MAP**.
    - FOR EXISTING LOTS, AND USES WITHIN 500' OF SUBJECT PROPERTY, SEE **VICINITY MAP**.
    - THERE ARE ADJACENT OPEN SPACE EASEMENTS OR PARK AND RECREATION LAND. LOUDOUN COUNTY PHILIP A. BOLEN MEMORIAL PARK IS NORTH OF SYCOLIN CREEK AND COCHRAN MILL ROAD.
  - SEE **OPEN SPACE MAP AND ZONING TABULATIONS** TABLE ON THIS SHEET FOR DELINEATION AND DESCRIPTION OF OPEN SPACE AREAS.
  - SEE COVER SHEET FOR APPLICANT NAME AND SIGNATURE.
  - ALL PROPOSED TRAVELWAYS WITHIN THE SITE SHALL BE PRIVATE.
  - THE DEVELOPMENT OF THE SUBJECT PROPERTY WITH COMPLY WITH ALL LIGHTING, SIGNAGE AND NOISE STANDARDS PER THE FSM AND THE REVISED 1993 Z.O.

NOTES:  
INFORMATION TABULATION

- THERE ARE NO DWELLING UNITS PROPOSED WITH THIS APPLICATION.
- SEE **ZONING TABULATIONS** TABLE FOR MAX SQUARE FEET OF BUILDING FLOOR AREA PROPOSED FOR NONRESIDENTIAL USES.
- SEE **ZONING TABULATIONS** TABLE FOR TOTAL LAND AREA.
- SEE **ZONING REQUIREMENTS** TABLE ON THIS SHEET FOR LOT AND BUILDING REQUIREMENTS.
- PARKING TO BE PROVIDED TO MEET THE MINIMUM REQUIREMENTS OF SECTION 5-1100 OF THE REVISED 1993 LOUDOUN COUNTY ZONING ORDINANCE.
- SITE LIGHTING WILL BE PROVIDED IN ACCORDANCE WITH THE MINIMUM REQUIREMENTS OF SECTION 5-1504 OF THE REVISED 1993 LOUDOUN COUNTY ZONING ORDINANCE.
- NOISE STANDARDS WILL BE PROVIDED IN ACCORDANCE WITH THE MINIMUM REQUIREMENTS OF SECTION 5-1507 OF THE REVISED 1993 LOUDOUN COUNTY ZONING ORDINANCE.



OPEN SPACE  
SCALE: 1"=800'

NOTE:  
OPEN SPACE WILL BE GREATER THAN OR EQUAL TO 50% OF NET LAND AREA. (SEE ZONING TABULATIONS TABLE FOR OPEN SPACE CALCULATIONS.)

ZONING TABULATIONS TABLE

OVERALL PD-IP SITE DENSITY TABULATION							
Gross District Area (ac)	Major Floodplain (Ac)	Net Area for FAR (Ac)	Maximum FAR (sf) (0.40)	Maximum FAR (sf) (0.60) PER SPEX	Proposed (sf) FAR PER SPEX	Proposed (%) FAR PER SPEX	Open Space Area (ac)
193.59	5.44	188.15	3,278,325.6	4,917,488.4	4,900,000	0.60	97.42

ZONING REQUIREMENTS TABLE

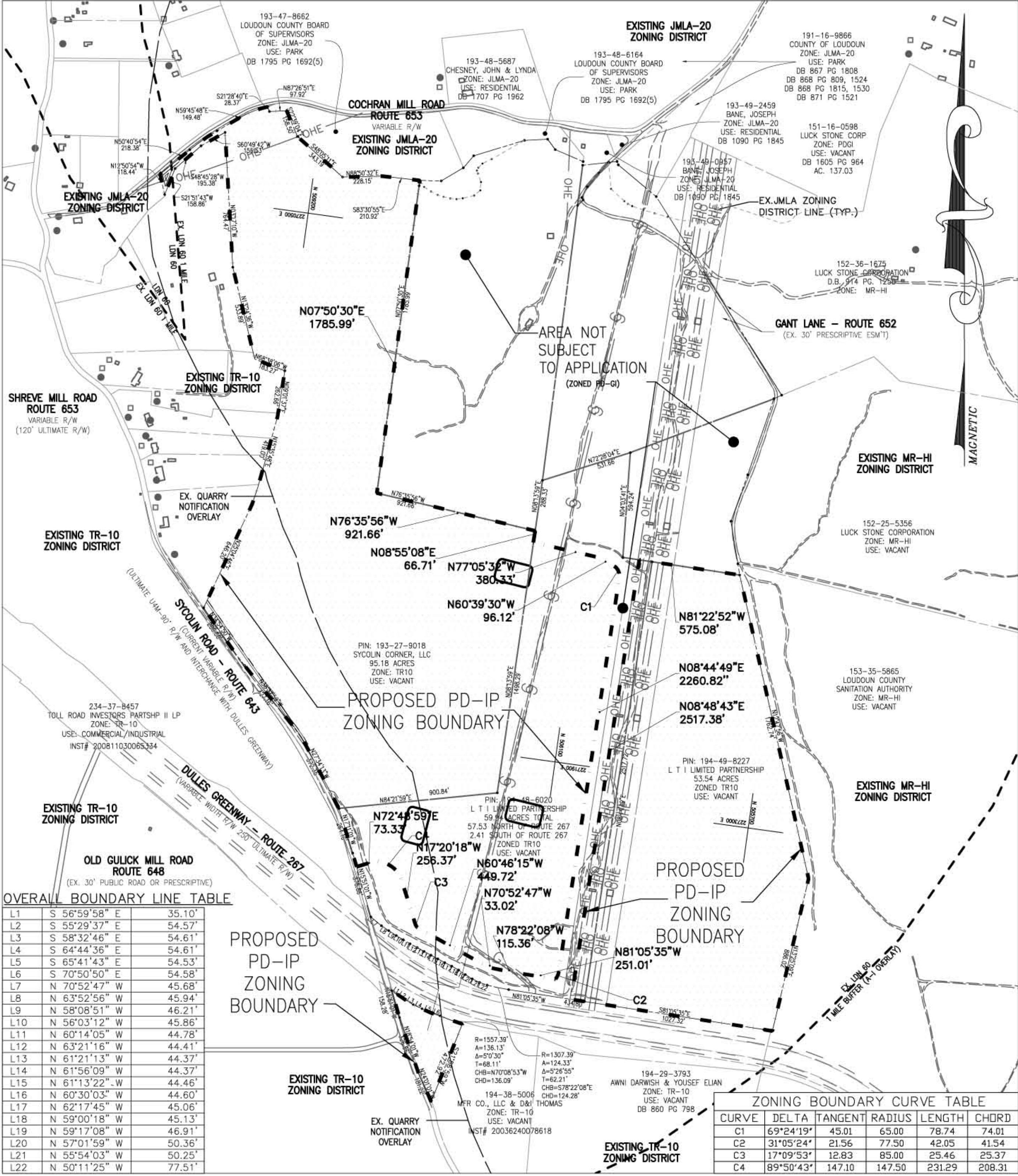
PD-IP LOT & BUILDING REQUIREMENTS				
		Ordinance Standard	Proposed	Zoning Ordinance Section
<b>Lot Requirements</b>				
District Size:		20 acre min.	193.97 ac	4-502
Lot Size (excluding floodplain):		1 acre min.		4-505(A)
<b>Setbacks</b>		Building	Parking	Building
Adjacent to Sycolin Road (Route 643)		75'	35'	75'
Adjacent to Other Road Right-of-Ways		35'	25'	35'
Adjacent to Dulles Greenway (Route 267)		150'	100'	150'
Adjacent to Interchange Ramps		75'	35'	75'
Adjacent to agricultural/residential		75'	60'	75'
Adjacent to other non-residential		15'	15'	15'
<b>Yards</b>				
Between buildings on individual lots or sites		30'	30'	4-505(B)(4)
Between buildings on same lot or site		25'	25'	4-505(B)(4)
<b>Building Requirements</b>				
Lot Coverage		0.45 max lot coverage	Less than or equal to 0.45	4-506(A)
Building Height		45' up to 100' with 1' additional setback for each 1' above 45'	100' without additional setback	4-506(B) / Zoning Modification
FAR		0.40	0.60	4-506(C.) SPEX 2008-0068
<b>Landscaping Requirements</b>				
Open Space (20% of Buildable Area)		20%	Equal to or greater than 20%	4-507(B)

ZONING MODIFICATION MATRIX	
Section	Requirement
PD-IP Zoning District	
4-502	Size and Location
4-506 (B)	Building Height
4-507(C)	Screening & Buffering
See Proffers and Statement of Justification for details of the modification requests.	

PROPOSED SPEX LAND USES	
Office per Z.O. Section: 4-504(A)	
Increase allowable FAR to 0.60 for office use	
Water storage tank	
Water Treatment Plant	
Firing Range / Archery Range Indoor	
Utility substation transmission	

REZONING PLAT

SCALE: 1"=400'



PROPOSED PD-IP  
ZONING BOUNDARY

PROPOSED PD-IP  
ZONING BOUNDARY

OVERALL BOUNDARY LINE TABLE

L1	S	56°59'58"	E	35.10'					
L2	S	55°29'37"	E	54.57'					
L3	S	58°32'46"	E	54.61'					
L4	S	64°44'36"	E	54.61'					
L5	S	65°41'43"	E	54.53'					
L6	S	70°50'50"	E	54.58'					
L7	N	70°52'47"	W	45.68'					
L8	N	63°52'56"	W	45.94'					
L9	N	58°08'51"	W	46.21'					
L10	N	56°03'12"	W	45.86'					
L11	N	60°14'05"	W	44.78'					
L12	N	63°21'16"	W	44.41'					
L13	N	61°21'13"	W	44.37'					
L14	N	61°56'09"	W	44.37'					
L15	N	61°13'22"	W	44.46'					
L16	N	60°30'03"	W	44.60'					
L17	N	62°17'45"	W	45.06'					
L18	N	59°00'18"	W	45.13'					
L19	N	59°17'08"	W	46.91'					
L20	N	57°01'59"	W	50.36'					
L21	N	55°54'03"	W	50.25'					
L22	N	50°11'25"	W	77.51'					

ZONING BOUNDARY CURVE TABLE				
CURVE	DELTA	TANGENT	RADIUS	LENGTH CHORD
C1	69°24'19"	45.01	65.00	78.74
C2	31°05'24"	21.56	77.50	42.05
C3	17°09'53"	12.83	85.00	25.46
C4	89°50'43"	147.10	147.50	231.29

SUPPLEMENTAL DISTRICT REGULATIONS:

SECTION 5-616 UTILITY SUBSTATIONS. THE FOLLOWING STANDARDS SHALL APPLY TO THE DEVELOPMENT OF UTILITY SUBSTATIONS.

- UTILITY SUBSTATION, TRANSMISSION.
  - IN ALL AGRICULTURAL AND RESIDENTIAL DISTRICTS, UTILITY SUBSTATIONS SHALL BE LOCATED ON LOTS OF ONE (1) ACRE OR MORE.
  - IN ALL COMMERCIAL AND INDUSTRIAL DISTRICTS, UTILITY SUBSTATIONS SHALL BE LOCATED ON AT LEAST THE MINIMUM LOT SIZE OF THE DISTRICT.
- UTILITY SUBSTATION, DISTRIBUTION.
  - IN ALL AGRICULTURAL AND RESIDENTIAL DISTRICTS, UTILITY SUBSTATIONS SHALL BE LOCATED ON LOTS OF ONE (1) ACRE OR MORE.
  - IN ALL COMMERCIAL AND INDUSTRIAL DISTRICTS, UTILITY SUBSTATIONS SHALL BE LOCATED ON LOTS OF ONE (1) ACRE OR MORE.
- ALL UTILITY SUBSTATIONS SHALL BE LOCATED IN AREAS CONSISTENT WITH THE ADOPTED COMPREHENSIVE PLAN. A COMMISSION PERMIT SHALL BE REQUIRED UNLESS THE UTILITY SUBSTATION IS SPECIALLY DELINEATED IN THE COMPREHENSIVE PLAN.
- ALL UTILITY TRANSMISSION AND DISTRIBUTION SUBSTATIONS AND ACCESSORY STORAGE YARDS SHALL HAVE A MINIMUM TYPE FOUR (4) BUFFER YARD.
- SUCH UTILITIES MAY BE ACCESSED BY A PRIVATE ACCESS EASEMENT.

REVISIONS

- REVISED PER CLIENT AND COUNTY COMMENTS 8-11-10
- REVISED PER CLIENT COMMENTS 12-15-10
- REVISED PER COUNTY COMMENTS 2-18-11

SURVEY

DESIGN

DRAWN

CHECKED

DATE

July, 2009

SCALE

HORIZ: 1"=200'

VERT: N/A

REZONING PLAT / NOTES, TABULATIONS & REQUIREMENTS

STONEWALL SECURE BUSINESS PARK

ZMAP 2008-0017 & SPEX 2008-0068, 2008-0069,

2008-0070, 2010-0018, 2010-0034 & CMPT 2010-0014

CATCOTIN ELECTION DISTRICT

LOUDOUN COUNTY, VIRGINIA

JOB

2720-0102

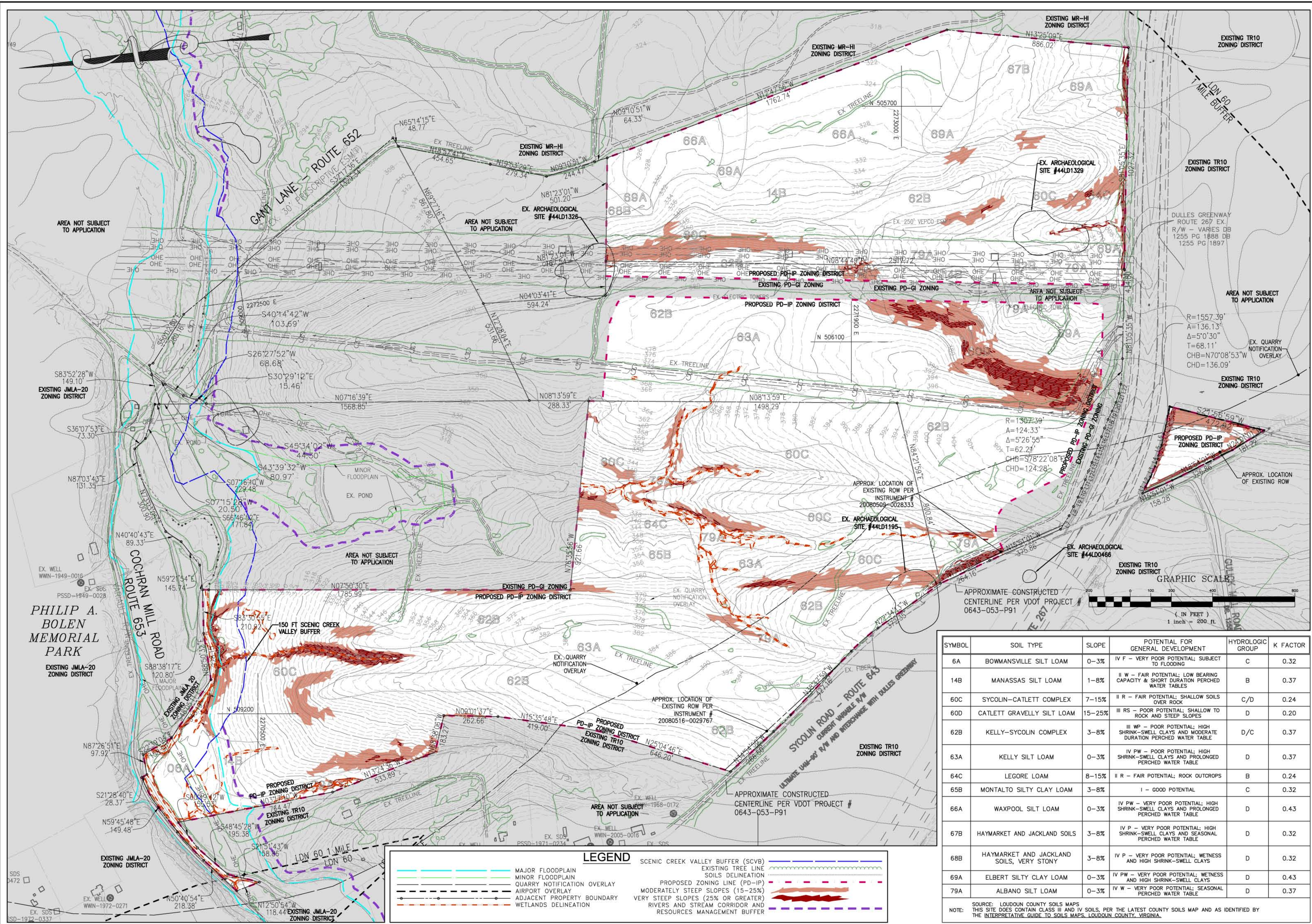
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Sheet 2 OF 7

SHEET

2 OF 7





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SURVEY

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DESIGN

C. STEPHENSON

DRAWN

C. STEPHENSON

CHECKED

DATE

July, 2009

SCALE

HORZ: 1"=200'  
VERT: N/A

EXISTING CONDITIONS PLAT

STONEMALL SECURE BUSINESS PARK  
ZMAP 2008-0017 & SPEX 2008-0068, 2008-0069,  
2008-0070, 2010-0018, 2010-0034 & CMPT 2010-0014  
CATOCTIN ELECTION DISTRICT  
LOUDOUN COUNTY, VIRGINIA

JOB

2720-0102

CADD

SHEET

3 OF 7

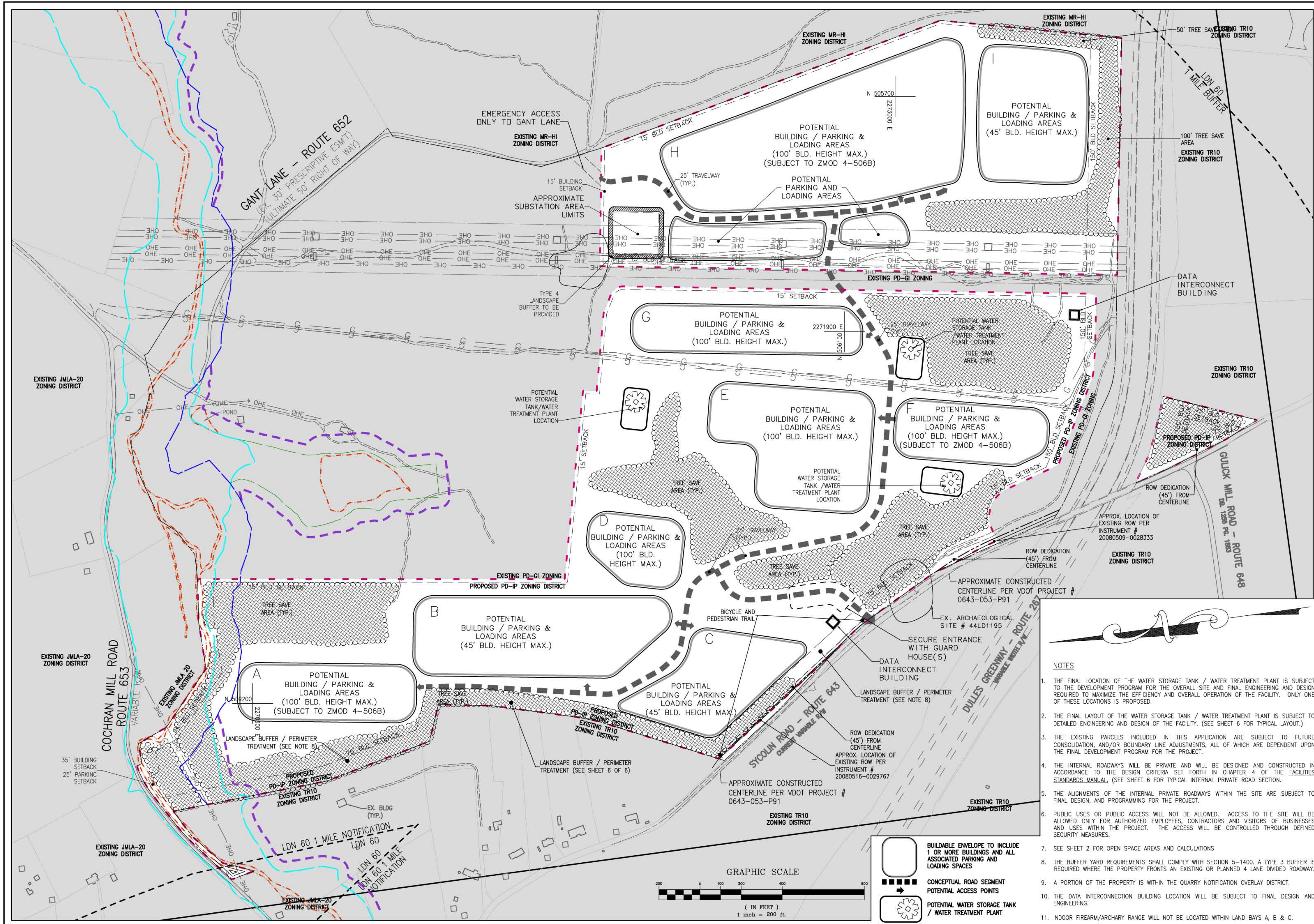
William H. Gordon Associates, Inc.

CIVIL ENGINEERING - SURVEY - LANDSCAPE ARCHITECTURE - LAND PLANNING - SITE SECURITY CONSULTING  
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SYMBOL	SOIL TYPE	SLOPE	POTENTIAL FOR GENERAL DEVELOPMENT	HYDROLOGIC GROUP	K FACTOR
6A	BOWMANVILLE SILT LOAM	0-3%	IV F - VERY POOR POTENTIAL; SUBJECT TO FLOODING	C	0.32
14B	MANASSAS SILT LOAM	1-8%	II W - FAIR POTENTIAL; LOW BEARING CAPACITY & SHORT DURATION PERCHED WATER TABLES	B	0.37
60C	SYCOLIN-CATLETT COMPLEX	7-15%	II R - FAIR POTENTIAL; SHALLOW SOILS OVER ROCK	C/D	0.24
60D	CATLETT GRAVELLY SILT LOAM	15-25%	III RS - POOR POTENTIAL; SHALLOW TO ROCK AND STEEP SLOPES	D	0.20
62B	KELLY-SYCOLIN COMPLEX	3-8%	III WP - POOR POTENTIAL; HIGH SHRINK-SWELL CLAYS AND MODERATE DURATION PERCHED WATER TABLE	D/C	0.37
63A	KELLY SILT LOAM	0-3%	IV PW - POOR POTENTIAL; HIGH SHRINK-SWELL CLAYS AND PROLONGED PERCHED WATER TABLE	D	0.37
64C	LEGORE LOAM	8-15%	II R - FAIR POTENTIAL; ROCK OUTCROPS	B	0.24
65B	MONTALTO SILTY CLAY LOAM	3-8%	I - GOOD POTENTIAL	C	0.32
66A	WAXPOOL SILT LOAM	0-3%	IV PW - VERY POOR POTENTIAL; HIGH SHRINK-SWELL CLAYS AND PROLONGED PERCHED WATER TABLE	D	0.43
67B	HAYMARKET AND JACKLAND SOILS	3-8%	IV P - VERY POOR POTENTIAL; HIGH SHRINK-SWELL CLAYS AND SEASONAL PERCHED WATER TABLE	D	0.32
68B	HAYMARKET AND JACKLAND SOILS, VERY STONY	3-8%	IV P - VERY POOR POTENTIAL; WETNESS AND HIGH SHRINK-SWELL CLAYS	D	0.32
69A	ELBERT SILTY CLAY LOAM	0-3%	IV PW - VERY POOR POTENTIAL; WETNESS AND HIGH SHRINK-SWELL CLAYS	D	0.43
79A	ALBANO SILT LOAM	0-3%	IV W - VERY POOR POTENTIAL; SEASONAL PERCHED WATER TABLE	D	0.37

NOTE: SOURCE: LOUDOUN COUNTY SOILS MAPS  
THIS SITE DOES CONTAIN CLASS III AND IV SOILS, PER THE LATEST COUNTY SOILS MAP AND AS IDENTIFIED BY THE INTERPRETATIVE GUIDE TO SOILS MAPS, LOUDOUN COUNTY, VIRGINIA.





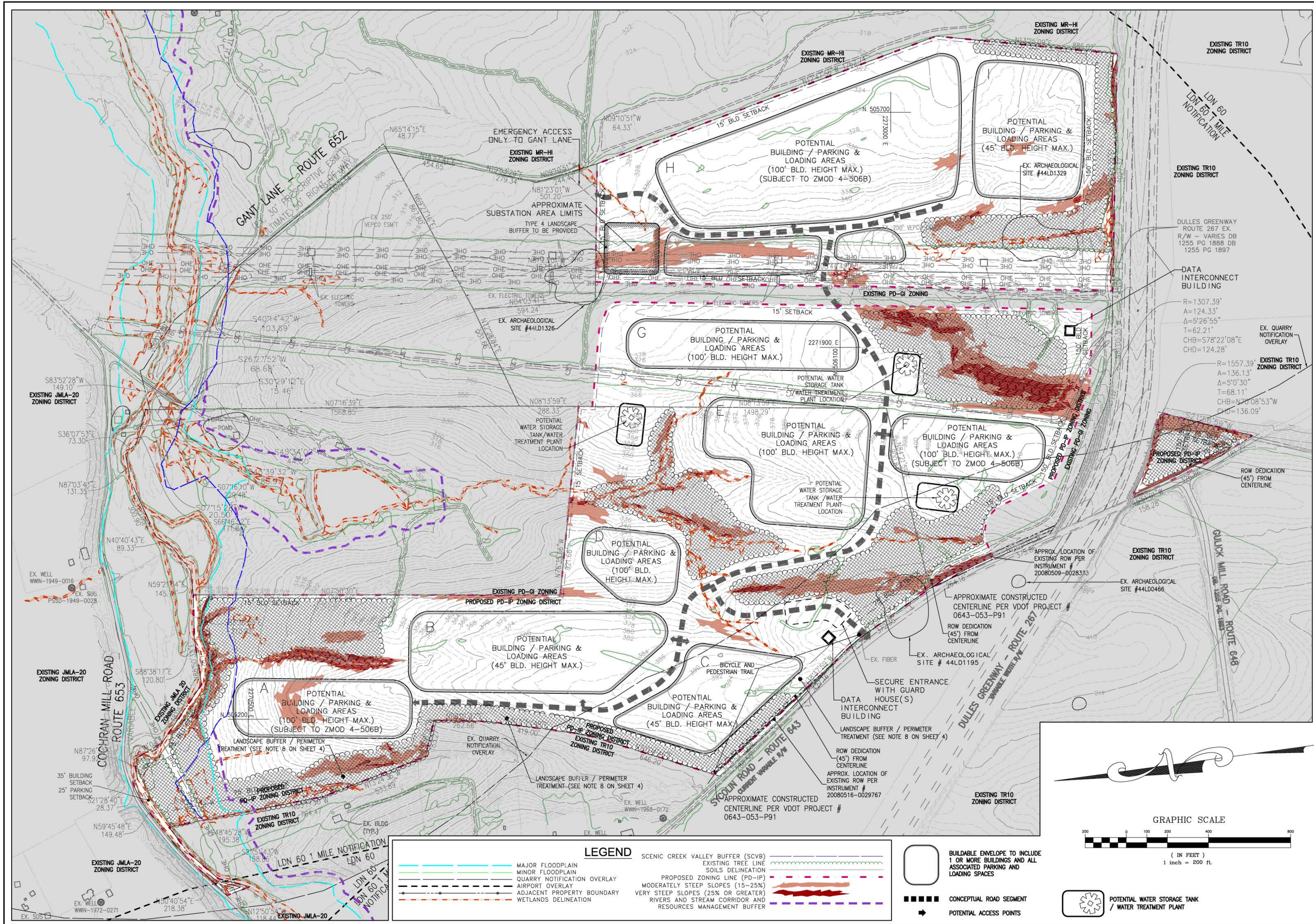
- NOTES**
1. THE FINAL LOCATION OF THE WATER STORAGE TANK / WATER TREATMENT PLANT IS SUBJECT TO THE DEVELOPMENT PROGRAM FOR THE OVERALL SITE AND FINAL ENGINEERING AND DESIGN REQUIRED TO MAXIMIZE THE EFFICIENCY AND OVERALL OPERATION OF THE FACILITY. ONLY ONE OF THESE LOCATIONS IS PROPOSED.
  2. THE FINAL LAYOUT OF THE WATER STORAGE TANK / WATER TREATMENT PLANT IS SUBJECT TO DETAILED ENGINEERING AND DESIGN OF THE FACILITY. (SEE SHEET 6 FOR TYPICAL LAYOUT.)
  3. THE EXISTING PARCELS INCLUDED IN THIS APPLICATION ARE SUBJECT TO FUTURE CONSOLIDATION, AND/OR BOUNDARY LINE ADJUSTMENTS, ALL OF WHICH ARE DEPENDENT UPON THE FINAL DEVELOPMENT PROGRAM FOR THE PROJECT.
  4. THE INTERNAL ROADWAYS WILL BE PRIVATE AND WILL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE TO THE DESIGN CRITERIA SET FORTH IN CHAPTER 4 OF THE FACILITIES STANDARDS MANUAL, (SEE SHEET 6 FOR TYPICAL INTERNAL PRIVATE ROAD SECTION).
  5. THE ALIGNMENTS OF THE INTERNAL PRIVATE ROADWAYS WITHIN THE SITE ARE SUBJECT TO FINAL DESIGN, AND PROGRAMMING FOR THE PROJECT.
  6. PUBLIC USES OR PUBLIC ACCESS WILL NOT BE ALLOWED. ACCESS TO THE SITE WILL BE ALLOWED ONLY FOR AUTHORIZED EMPLOYEES, CONTRACTORS AND VISITORS OF BUSINESSES AND USES WITHIN THE PROJECT. THE ACCESS WILL BE CONTROLLED THROUGH DEFINED SECURITY MEASURES.
  7. SEE SHEET 2 FOR OPEN SPACE AREAS AND CALCULATIONS
  8. THE BUFFER YARD REQUIREMENTS SHALL COMPLY WITH SECTION 5-1400. A TYPE 3 BUFFER IS REQUIRED WHERE THE PROPERTY FRONTS AN EXISTING OR PLANNED 4 LANE DIVIDED ROADWAY.
  9. A PORTION OF THE PROPERTY IS WITHIN THE QUARRY NOTIFICATION OVERLAY DISTRICT.
  10. THE DATA INTERCONNECTION BUILDING LOCATION WILL BE SUBJECT TO FINAL DESIGN AND ENGINEERING.
  11. INDOOR FIREARM/ARCHERY RANGE WILL NOT BE LOCATED WITHIN LAND BAYS A, B & C.

REVISIONS	
1.	REVISED PER CLIENT AND COUNTY COMMENTS 8-11-10
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3.	REVISED PER COUNTY COMMENTS 2-18-11
SURVEY	
DESIGN	
DRAWN	
C. STEPHENSON	
CHECKED	
C. STEPHENSON	
DATE	
July, 2009	
SCALE	
HORIZ: 1"=200'	
VERT: N/A	
CONCEPT PLAN	
(ZMAP/SPEX/PLAT)	
JOB	
2720-0102	
CADD	
SHEET	
4 OF 7	

**STONEWALL SECURE BUSINESS PARK**  
ZMAP 2008-0017 & SPEX 2008-0068, 2008-0069,  
2008-0070, 2010-0018, 2010-0034 & CMPT 2010-0014  
CATOCTIN ELECTION DISTRICT  
LOUDOUN COUNTY, VIRGINIA

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SURVEY

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DESIGN

C. STEPHENSON

DRAWN

C. STEPHENSON

CHECKED

DATE

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CONCEPT / SPEX PLAN OVER EXISTING CONDITIONS

STONEWALL SECURE BUSINESS PARK

ZMAP 2008-0017 & SPEX 2008-0068, 2008-0069,

2008-0070, 2010-0018, 2010-0034 & CMPT 2010-0014

CATCOTIN ELECTION DISTRICT

LOUDOUN COUNTY, VIRGINIA

JOB

2720-0102

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Sheet 5 OF 7

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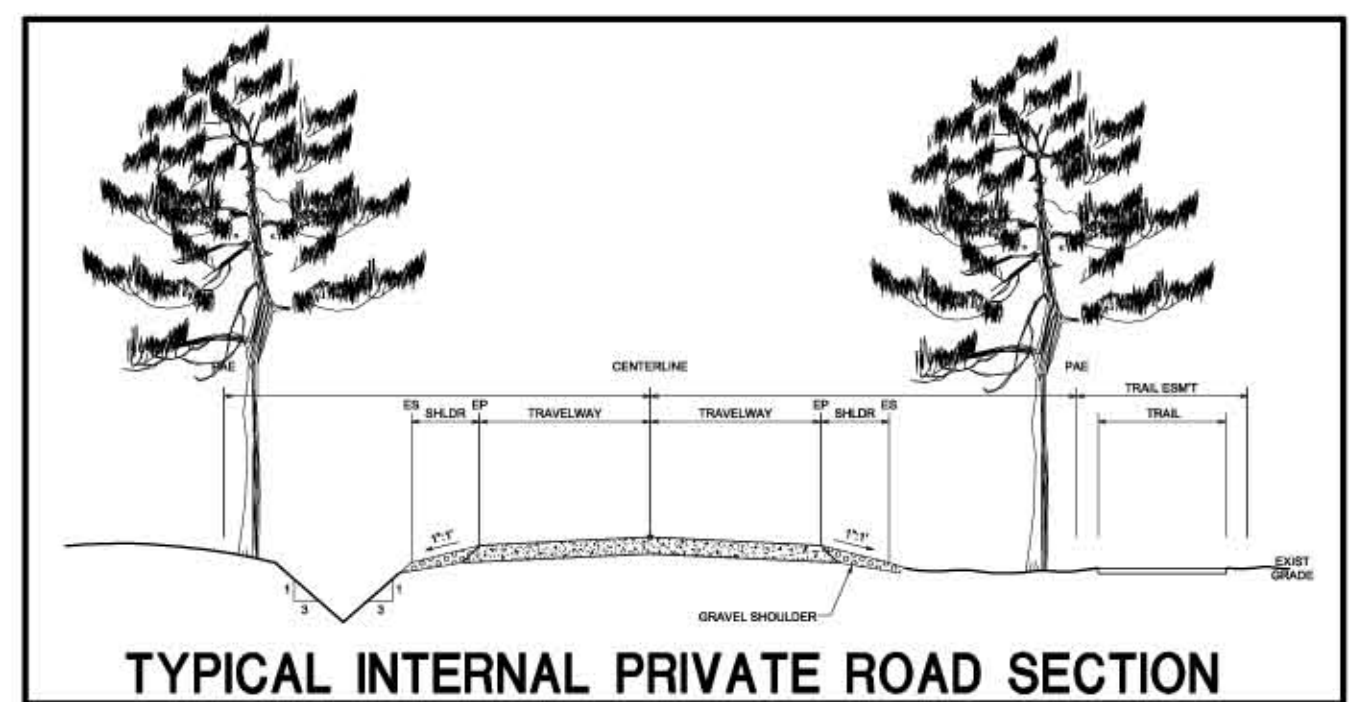


VARIABLE WIDTH SECURITY ZONE WITH PERIMETER TREATMENT  
(SEE SHEETS 4 AND 5 FOR LOCATIONS)

MIN. 50' LANDSCAPE BUFFER AREA

NOTE:  
EXISTING TREES AND VEGETATION WILL BE RETAINED AND SUPPLEMENTED WITH PLANTINGS TO THE MINIMUM LANDSCAPE BUFFER REQUIREMENTS WITHIN THE 50' LANDSCAPE BUFFER/PERIMETER AREA.

(PROPERTY LINE)



- NOTES**
1. THIS TYPICAL DETAIL FOR THE WATER STORAGE TANK / WATER TREATMENT FACILITY IS FOR ILLUSTRATIVE PURPOSES ONLY AND IS SUBJECT TO DETAILED ENGINEERING AND DESIGN. THE ABOVE DETAIL IS AN EXAMPLE AND MAY BE MODIFIED AND/OR EXPANDED AS WARRANTED TO MEET PROJECT BUILDOUT PROJECTIONS.
  2. IN ADDITION TO FINAL ENGINEERING AND DESIGN, THE LAYOUT OF THE WATER STORAGE TANK / WATER TREATMENT FACILITY IS SUBJECT TO CHANGE PER THE DEVELOPMENT PROGRAM FOR THE OVERALL SITE, AS REQUIRED TO MAXIMIZE THE EFFICIENCY AND OVERALL OPERATION OF THE FACILITY.
  3. THE WATER STORAGE TANK WILL BE SETBACK A MINIMUM OF 120' FROM THE PROPERTY LINE OR IN THE SPECIFIC AREAS THERE WILL BE A 100' MAX. BUILDING HEIGHT LIMITATION AS DEPICTED ON SHEET 4.



- NOTES:**
1. THIS TYPICAL ELEVATION DETAIL FOR THE WATER STORAGE TANK / WATER TREATMENT FACILITY IS FOR ILLUSTRATIVE PURPOSES ONLY AND IS SUBJECT TO CHANGE PER FINAL DESIGN CRITERIA SUBJECT TO ZONING ADMINISTRATOR APPROVAL. THE ABOVE DETAIL IS AN EXAMPLE AND MAY BE MODIFIED AND/OR EXPANDED AS WARRANTED TO MEET PROJECT BUILDOUT PROJECTIONS.
  2. IN ADDITION TO FINAL ENGINEERING AND DESIGN, THE WATER STORAGE TANK / WATER TREATMENT FACILITY SIZE AND DIMENSION ARE SUBJECT TO CHANGE PER THE DEVELOPMENT PROGRAM FOR THE OVERALL SITE, AS REQUIRED TO MAXIMIZE THE EFFICIENCY AND OVERALL OPERATION OF THE FACILITY.

- NOTES: SECURITY MEASURES MAY INCLUDE BUT ARE NOT LIMITED TO THE FOLLOWING:
- BERM SECURITY MAY BE ENHANCED BY ORNAMENTAL ELEMENTS INCLUDING HOSTILE VEGETATION, BOULDERS, WATER FEATURES AND FENCING
  - TRAFFIC CONTROL TO BE ENHANCED USING FEATURES SUCH AS SPEED BUMPS, CURVILINEAR ALIGNMENTS, AND NARROW TRAVELWAYS
  - FENCING MAY BE INCLUDED ALONG SITE PERIMETER
  - CAMERAS AND ASSOCIATED LIGHTING TO BE ADDED AS NEEDED
  - SECURITY MEASURES SHOWN ON THIS PLAN ARE FOR ILLUSTRATIVE PURPOSES ONLY AND ARE SUBJECT TO FINAL SECURITY DESIGN.

[illegible]



ACCESS CONTROL OPTIONS

- GRAB BARRIER (FORM OF RETRACTABLE BOLLARD)



- ELECTRIC WEDGE (FORM OF RETRACTABLE BOLLARD)
- TRADITIONAL RETRACTABLE BOLLARD



- CRASH RATED BARRIER ARM



PERIMETER SECURITY TREATMENT OPTIONS

- IMPLEMENT STORM WATER MANAGEMENT AS PART OF ACCESS CONTROL
- IMPLEMENT TRAFFIC CALMING MEASURES TO DETER HASTY EXITS.



- BERM WITH LANDSCAPING
- KEEP SHRUBS TO 2' HEIGHT MAX AND LIMB UP TREES TO 6' TO MAINTAIN SIGHT LINES THROUGHOUT PERIMETER



- SECURITY FENCING



- BERM WITH BOULDERS (BOULDERS EXISTING ON SITE)



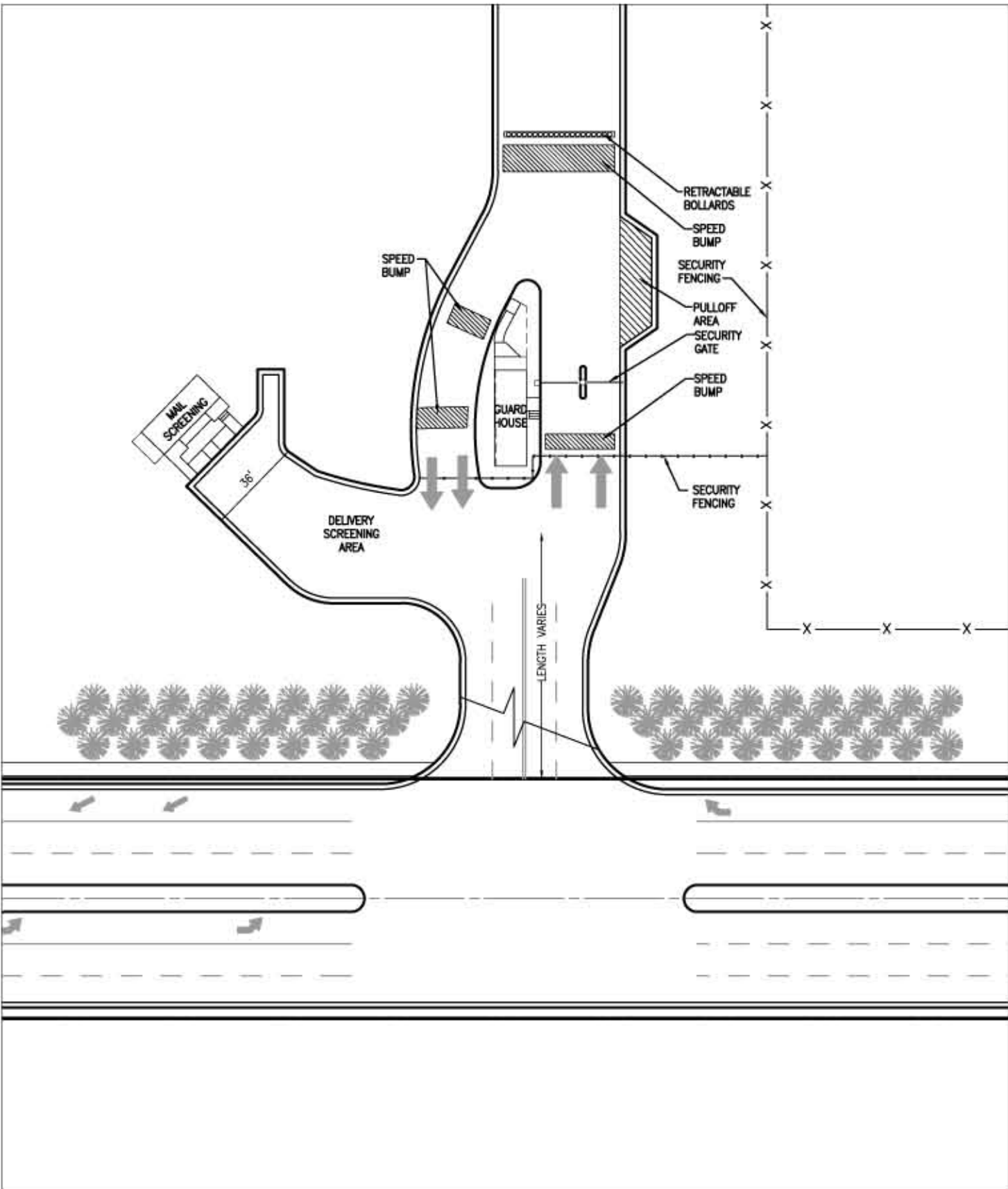
- FENCING MAY BE ENHANCED TO HEIGHTEN SECURITY LEVEL BY SECURING THE BASE TO PREVENT DIGS. CAMERAS AND APPROPRIATE LIGHTING MAY BE ADDED TO THE TOP.

- ROADSIDE SWALE WITH RETENTION OPPORTUNITY FOR STORMWATER MANAGEMENT PROGRAM.



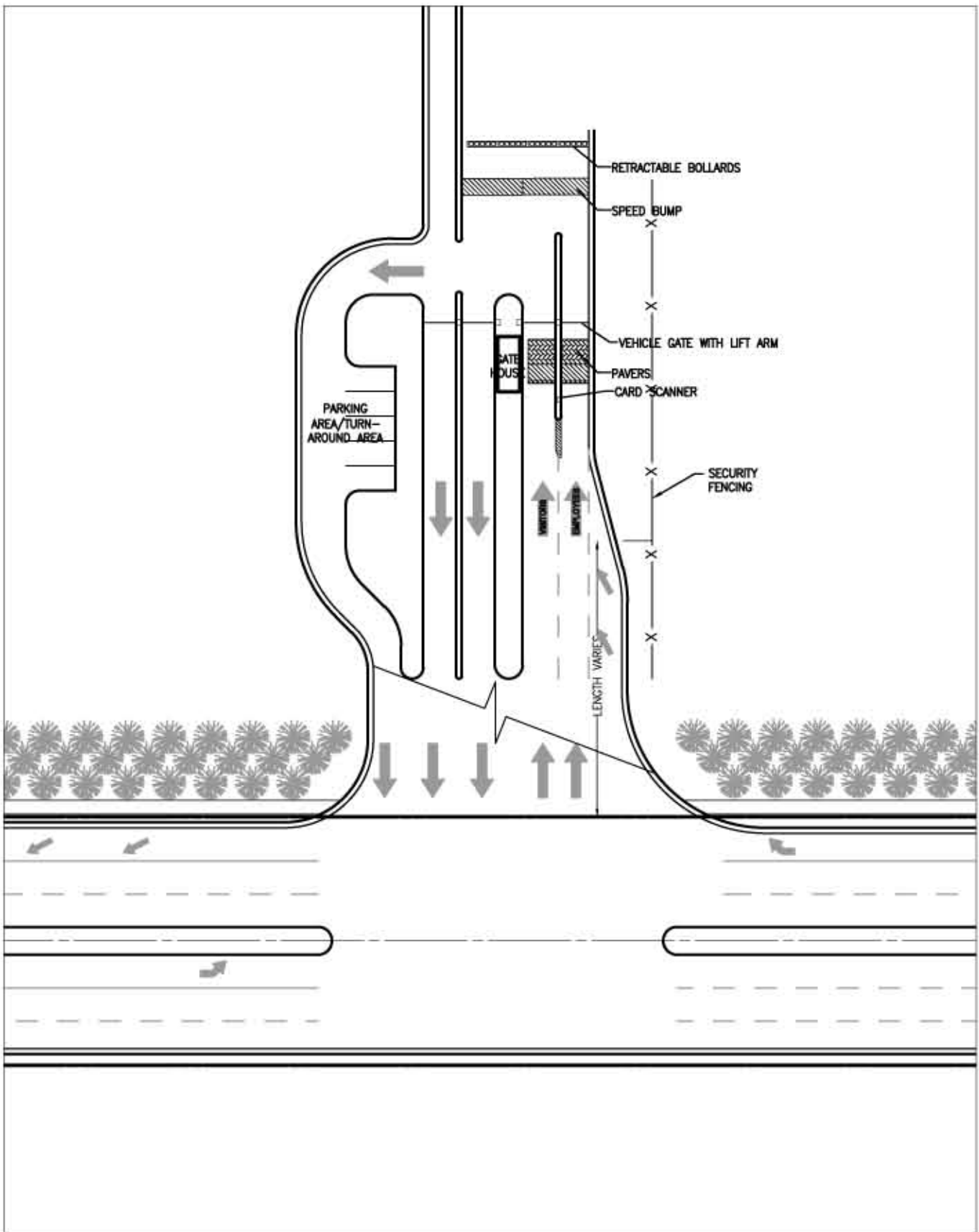
ENTRANCE EXAMPLE #1  
(FOR ILLUSTRATIVE PURPOSES ONLY)

SCALE: 1"=50'



ENTRANCE EXAMPLE #2  
(FOR ILLUSTRATIVE PURPOSES ONLY)

SCALE: 1"=50'



- NOTES:
- THE ABOVE ENTRANCES ARE EXAMPLES AND MAY BE MODIFIED AND/OR EXPANDED AS WARRANTED TO MEET PROJECT BUILDOUT PROJECTIONS.

THIS SHEET IS FOR INFORMATIONAL PURPOSES ONLY AND NOT PROFFERED

REVISIONS

1. REVISED PER CLIENT AND COUNTY COMMENTS 8-11-10

2. REVISED PER COUNTY COMMENTS 12-15-10

3. REVISED PER COUNTY COMMENTS 2-18-11

SURVEY

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DESIGN

C.STEPHENSON

DRAWN

C. STEPHENSON

CHECKED



CIVIL ENGINEERING • SURVEY • LANDSCAPE ARCHITECTURE • LAND PLANNING • SITE SECURITY CONSULTING

**William H. Gordon Associates, Inc.**

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www.wingco.com

DATE

July, 2009

SCALE

HORZ: N/A

VERT: N/A

SECURITY ELEMENTS

STONEWALL SECURE BUSINESS PARK

ZMAP 2008-0017 & SPEX 2008-0068, 2008-0069, 2008-0070, 2010-0018, 2010-0034 & CMPT 2010-0014

CATOCTIN ELECTION DISTRICT

LOUDOUN COUNTY, VIRGINIA

JOB

2720-0102

CADD

SHEET

7 OF 7